

The New I-64 Economic and Regional Mobility Study

**Annual Report
2009**

**January 2009 to
December 2009**

HDR



**Heartland Market
Research**

**For
Missouri Department of
Transportation**

Final Report

**The New I-64 Economic and Regional Mobility Study
2009 Annual Report**

Prepared for
Missouri Department of Transportation
Organizational Results

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Executive Summary

The research team has found the following results on the four key study areas:

Communications

The Eastern closure in 2009 had a noticeable impact on respondent behavior and travel habits.

- A sizeable minority reported changes in their shopping and driving habits
- Many respondents reported slightly longer daily commutes compared to pre-construction period
- Majority of respondents are satisfied with how they are able to get around St. Louis (60 percent)
- Overwhelming majority of respondents are satisfied with MoDOT's decision to close parts of I-64 for two years instead of taking 6-8 years with lane closures (83 percent in the lowest measurement, 96 percent in the highest both up when compared to 2008)
- Overall, the respondents have a high level of satisfaction with how the I-64 closure has been handled (78 percent)
- The overwhelming majority of responses received are very satisfied/satisfied when asked about the delivery of timely, accurate and understandable project information (86 percent)

Considering the reported changes in respondents' behavior, these are extremely high levels of satisfaction and reflect the public consensus that this project was well planned and delivered within the "promised" 2 year period.

Mobility

The following are our findings from the Eastern closure period in 2009:

- Traffic volumes (2009 compared to 2007) along I-70 decreased west of I-170, but increased east of I-170. Traffic volumes along I-270 south of I-64 increased by 30,000 to 40,000 vehicles per day. I-44 also experienced an increase in traffic volumes, ranging from an increase of 22,000 vehicles per day east of I-270 at Lindbergh Boulevard to an additional 7,000 vehicles per day near Jefferson Avenue. I-170 experienced increases between 7,000 and 15,000 vehicles per day. I-64 west of I-270 experienced increases ranging between 8,000 and 11,000 vehicles per day.
- Travel speeds (2009 compared to 2007) have remained about the same even with the increases in traffic volumes mentioned above. There were slight decreases in travel times along some of the region's freeway network. Improvements in the operation of these adjacent roadways were the result of some of the pre-closure improvements and regional coordination across city/county/state agencies.
- Parallel arterial routes experienced increases in traffic volumes as well as travel time (2009 compared to 2007). East-west arterial corridors, such as Manchester Road, Forest Park Parkway and Olive Street, realized increases of between 10,000 and 20,000 vehicles per day. North-south arterial corridors such as Hanley Road and Lindbergh Boulevard experienced a slight increase in traffic volumes and travel times.
- The RideFinders Rideshare program experienced a significant increase through most of 2008 as it approached the 10,000 membership plateau in November. In 2009, rideshare

for both carpool and vanpool users dropped slightly or remained the same from the end of 2008. The increase in 2008 and stability in 2009 most likely means that the change in the Rideshare program could be a combination of gas prices, economic conditions and/or the I-64 project.

- Usage of commuter park-and-ride facilities in Missouri returned to similar levels experienced in 2007 demonstrating that park-n-ride facilities were most likely impacted in 2008 by higher gas prices and the economy, not significantly by the I-64 closure.

Based on the evaluation of regional mobility, the study team concluded the traffic volume increased on alternative routes that caused a slight increase travel times and decreased travel speeds. Regional planning and improvements to alternative routes significantly reduced and minimized travel impacts.

Economics

The Congressional Budget Office (CBO) is projecting the economic recovery will continue at a modest pace during the next few years, and projects that the economy will grow by two percent from the fourth quarter of 2010 through the fourth quarter of 2011.¹ CBO anticipates national unemployment levels will not return to five percent until 2014. The St. Louis area appears to be following this national trend and forecast.

From the analysis of economic conditions, business surveys, and user transportation costs, the following represent the major results:

- The reconstruction of I-64 created more circuitous routes for commuters during closures thus reducing average speeds and increasing vehicle miles traveled;
- During reconstruction 98,000 to 120,000 vehicles were diverted daily and transportation user costs increased by \$101.5 million during entire project. This represents less than 4.4 percent of the total transportation spending in St. Louis during the I-64 closure period (2008 through 2009);
- Alternatively, if I-64 had been reconstructed using a more conventional phased construction period of 6 to 8 years, user costs would have increased from additional traffic delays over the full-closure costs by \$45.6 to \$86.8 million;
- The project demonstrated a significant cost savings – between \$92 and \$187 million – from accelerating the reconstruction project schedule to two years versus a six or eight year staged construction schedule;
- Businesses expected the worst, but the conditions during the western and eastern closures were not as bad as they anticipated. Design-Build delivery and an aggressive project schedule were successful in minimizing the duration of impacts to the region;
- While the economic recession made the assessment difficult to determine the precise impact of the I-64 reconstruction, the analysis found the impacts to the corridor region were no different than economic conditions across Missouri and the nation;
- The evaluation of economic conditions, statistical analysis, business surveys, and transportation analysis of user costs has demonstrated that the impacts of the New I-64

¹ <http://www.cbo.gov/doc.cfm?index=11705>

Project on the regional economy were relatively minor compared to an alternative long-term project schedule;

- All three surveys reported high-levels of satisfaction (all above 86 percent) with the I-64 project. The final survey found that 93 percent of responding businesses were satisfied with the project as the sections of I-64 closest to downtown St. Louis were reopening;
- Throughout the project, approximately half of the businesses responding found no change in sales or customers.

Given that I-64 has only been reopened for a short period of time, and that the economy is still recovering from the recession, revisiting this study to evaluate the long-term impacts could provide an indication of future project benefits from this major transportation project.

Crash Analysis

The study team evaluated 6 years (2004-2009) of crash data that occurred on 17 different roadways in the vicinity of the I-64 closure. Using crash data, 2-year (2008 and 2009) closure crashes were compared to 4-year (2004-2007) pre-closure crashes in various ways. The major findings from the crash analysis are as follow:

- Comparing the average number of crashes for the pre-closure period (2004 through 2007) to the closure period (2008 and 2009) found the following results. The number of crashes increased on 5 roadways in 2008 and 4 roadways in 2009. Whereas the crash numbers decreased on 12 roadways in 2008 and 13 roadways in 2009.
- Comparing the average crash rates for the pre-closure period (2004 through 2007) to the closure period (2008 and 2009) found the following results. The crash rates increased on 5 roadways in 2008 and 4 roadways in 2009. Whereas the crash rates decreased on 12 roadways in 2008 and 13 roadways in 2009.
- The 4-year average number of crashes across the pre-closure period was 16,595 compared to 15,111 crashes in 2008 (9 percent reduction) and to 14,155 crashes in 2009 (15 percent reduction).

Based on the evaluation of crash numbers and rates and their associated trends along the 17 major diversionary roadways, the study team concludes that there was no evidence that the closure contributed to any increases in crashes and crash rates.

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Introduction

On December 14, 2008, the eastern closure began with the closure of I-64 between I-170 and Kingshighway Boulevard. On December 15, 2008, the western closure of the New I-64 was opened to traffic. Partners again implemented their regional command center operations to ensure that any traffic conditions were addressed and responded to as the public adjusted to the change in closure along I-64.

This annual report for 2009 assesses the approximate twelve months that eastern I-64 section was closed and re-opened on December 7, 2009.

This report evaluates the four key areas of **Communications** (MoDOT's provision of information to the public, and the public's response to the project), **Regional Mobility** (the effects of the closure/project on travel behavior, choices, and flow), **Regional Economics** (the effects of the closure/project on businesses within the corridor as well as the economic health of the region) and **Roadway Safety** (the effects of the closure/project on the region's roadway safety in regards to crash information).

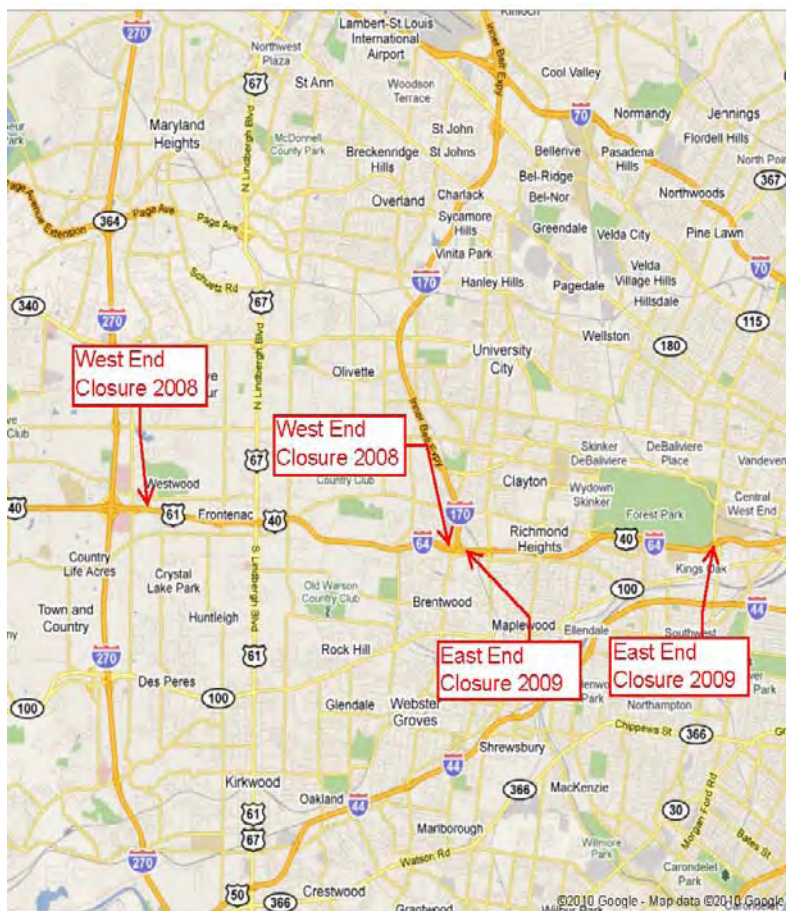


Figure I-1 – Closure Site Map

This report is the culmination of monthly and quarterly reports produced in 2009 included in Appendix C. This 2009 report and a similar 2008 annual report along with the post-construction assessment report will be included in the final report in early 2011.

Objectives

Assess potential impacts in the following areas to provide information on how the I-64 full-closure construction influenced regional activities:

- Communications
- Regional Mobility
- Roadway Safety
- Regional Economics

Present Conditions

Full-closure is a roadway construction strategy that has been considered when regional conditions exist where alternative roadways are available. This strategy permits construction to be accelerated and normally at a reduced construction cost. The major concern in implementing this strategy is the public concerns on impacts to region mobility, economics and safety.

Results and Discussion (Evaluation)

Communications Discussion

Major Goals – Communications

Develop and implement survey instruments
Determine effectiveness of pre-closure notification
Measure participant satisfaction for key issues
Estimate changes in behavior
Hear everyone's voice (obtain generalized sample)

Survey Methods and Characteristics

Response to surveys was 5,266 in 2009 measuring public opinions about the Eastern closure and how it may have changed behavior. Three survey methodologies were utilized in this study:

1. On-Line survey
2. Motorist Assist and I-64 Traffic Response surveys – two project related questions added
3. Second mail-out survey

These survey methodologies were consistent with those used in 2008.

On-Line Survey

Below are some statistics regarding the on-line survey on MoDOT's the New I-64 website:

- 444 responses were generated during the Eastern closure with 38 percent in the first quarter within the first few months after the closure transition from opening the west end and closing the east end
- Satisfaction with the overall project management, distribution of project information and the support of the decision to close for two years versus construction under traffic for 6 to 8 years remained in the upper 70 percent to low 80 percent.
- On-line respondents tended to be Caucasian and affluent.

Mailed Survey

Ten thousand St. Louis residents were randomly selected and mailed surveys in January 2009 and again in January 2010. Since the list of 10,000 residents was randomly selected from multiple St. Louis area zip codes, this method provided the most representative sample of the area. The intent to increase minority participation to ensure a diverse study was accomplished with this mailed survey instrument. The January 2010 mailed survey report is included in the Appendix A of this report. January 2008 and 2009 mailed survey reports were included in the 2008 Annual Report. The following Table C-1 shows a comparison of general information on this survey method.

Table C-1 – Mailed Survey Yearly Comparison

Year	2008	2009	2010
Mailed Surveys	10,000	10,000	10,000
Responses Received	776	1156	1559
Response Rate	7.8 percent	11.6 percent	15.6 percent

The responses received from African Americans rose from 16 percent in 2008 and 2009 to almost 20 percent in 2010. This method of survey helped ensure that a diverse opinion was heard on the I-64 evaluation.

Motorist Assist Surveys

Motorist Assist respondents tended to be less affluent than on-line respondents. People in the lower income bracket are less likely to respond to mail surveys and online surveys, so two key questions were added to the standard service survey already distributed by motorist assist operators to ensure that the most important questions regarding the I-64 study were asked of the lower income segment. These questions are as follows:

1. How satisfied are you with how well you are managing to move around the St. Louis area with the closure of I-64?
2. How satisfied are you with the decision to complete the work by closing I-64 for 2 years instead of taking 6-8 years to finish otherwise?

There were 3,666 responses in 2009 and their responses to two similar questions in both the on-line and motorist assist survey was generally higher in satisfaction in the mid to low 90 percent.

Survey Evaluation Methodology

The following seven (7) evaluation areas were developed to categorize the survey information gained and received from the various survey methods described above. The following defines the intent of the categorized evaluation area and the general overall results discovered:

- **“Awareness” defines how informed transportation users are with regard to the closure and other project construction activities that impact their normal travel patterns and region’s economy.** From the responses, it appears that MoDOT effectively communicated the closure to the affected population in 2007; pre-closure awareness was reported as very high. These responses have also reported that scheduled construction activities that impact travel have been effectively communicated.
- **“Satisfaction” defines how satisfied transportation users are with regard to the management of the construction project and travel in and around the St. Louis region.** Respondents are largely satisfied with their ability to travel around the region. They also are largely satisfied with project management that includes areas like the full closure approach, the level of information shared on project activities, and the project communication shared through various public information outlets.
- **“Information Sources” defines the various outlet sources that project information is shared and what are the most effective sources to get information to the transportation user.** TV News appears to be the best way to reach the majority of the respondents, with radio news, road signs and newspaper also being effective methods. For those who use the internet, online information sources are almost as effective as TV news. However, a large portion of the general population does not obtain their information via the internet and these other methods listed in this paragraph should continue to be used to reach them.

- **“Alternative Routes”** defines the designated and other alternate routes used by the transportation user to travel around the construction project. I-44 was the most recommended alternative route. Two nearby parallel arterials, Ladue Road and Clayton Road, received more negative responses when survey respondents were asked to make recommendations on preferred alternative routes.
- **“Travel Time”** defines respondents’ perception on how their travel times were impacted by the construction project. The majority of respondents are indicating that their travel time for basic trips have increased; although many have indicated no change or even a few reported an improvement in travel times.
- **“Travel Mode”** defines changes in transportation modes like use of transit or non-motorized transport (bike or walking) to accommodate their trips (commute, event/entertainment, shopping, etc.). Initial responses on how the closure has changed people’s mode of travel are somewhat inconclusive. It is clear that the dominant mode of travel by the respondents has been and continues to be by the automobile.
- **“Personal Impact”** defines how the construction project has impacted their trips in the region. The closure is affecting people’s trip choices. Survey respondents are indicating changes in basic trip destinations such as shopping and eating out. Overall, almost three quarters of respondents are indicating that their frequency of travel to certain areas has been affected by the closure. Most commuters have reported not shifting their normal commute time.

To date, the responses have been fairly consistent over the various survey methods. This general agreement across surveys is important because it appears to demonstrate that one can generalize from the surveys to the general population. Other than issues related to access to the online survey that is not available to all transportation users for various reasons, the web-based survey instrument may present skewed information.

The selection of a target area with the mailed survey to help ensure greater diverse survey participation and to counter potential web-based survey impacts was utilized. Also, the inclusion of two key questions on the Motorist Assist Survey increasing a more diverse participation in providing opinions on how the project potentially impacted a lower income population.

In order to facilitate better comparisons of changes across survey types and from time to time, the statistics used in the project assessment usually do not include the “not sure” or “no opinion” percentages. This eliminates a major source of random variability and allows a more accurate observation of change over time. In addition, this methodology is consistent with how MoDOT calculates similar Tracker performance measures.

Communications Results

Awareness

This question was very important during the initial western closure to determine the level of awareness of I-64 being closed. In mid-2008, this question was removed when revising the on-line survey to better reflect and assess the I-64 project. It was discovered in the first six months of 2008 that 98.1 percent of the on-line respondents were aware of the upcoming closure in 2007, and since 97.2 percent of the online respondents traveled on the affected section of I-64 at least once per week before the closure, it appears that the target population received the needed advance information and addressed the awareness issue.

Satisfaction

The Table C-2 below summarizes survey respondents' opinions in the area of satisfaction. As the on-line survey display indicates when comparing 2009 to 2008, three indicators remained about the same (green shading) while two indicators (rose shading) showed a detectable difference. In 2009, we noticed that people expressed less satisfaction with their ability to move around the St. Louis area. In a potential opposite response, they expressed an increased satisfaction for the 2-year closure construction approach.

Table C-2 – On-line Survey Satisfaction Comparison

Key Public Satisfaction Indicators – On-line Survey	2009	2008
Overall level of satisfaction with how the I-64 closure has been handled	78%	77%
Satisfaction with how well the public kept informed about the new I-64 project	86%	89%
Satisfaction with how well managing to move around the St. Louis area w/ the closure	60%	70%
Satisfaction with timeliness of information being made available	86%	87%
Satisfaction with decision to complete the work by closing I-64 for 2 years instead of 6-8 years w/ lane closures	83%	76%

Table C-3 provides information on the two survey questions for the motorist assist and I-64 traffic response programs showed a higher satisfaction level for similar questions. This may indicate that those receiving service patrol assistance responded in a more positive manner of appreciation. This indication is another acknowledgement that these programs are well appreciated by transportation users. It could be another potential indicator that the I-64 traffic response program implemented for this project was well accepted.

Table C-3 – Motorist Assist Survey Questions Comparison

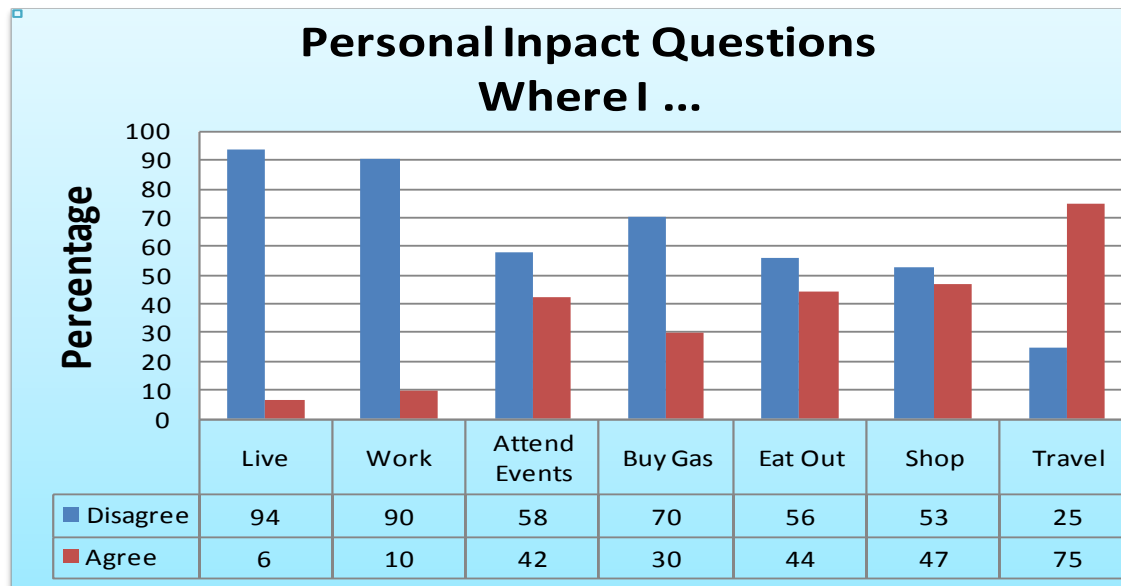
Key Public Indicators - Motorist Assist Comparison of Both Closures	2009	2008
Satisfaction with how well managing to move around the St. Louis area w/ the closure	90%	90%
Satisfaction with decision to complete the work by closing I-64 for 2 years instead of 6-8 years w/ lane closures	96%	94%

One notable item is that survey respondents have expressed satisfaction regarding the regional collaboration on signal timing that has facilitated arterial flow during construction. The public has also expressed a desire to see these signal timing improvements continued after the project is complete along major arterial corridors.

Personal Impact of the Closure

The questions on how the I-64 construction and the full closure impacted regional travel will help in measuring and confirming potential travel and economic impacts. As the Figure C-1 below indicates, respondents much more often modified their frequency of travel to certain areas than the location of their basic trip destinations. The most affected destinations were attending events (42 percent), eat out (44 percent), shopping (47 percent) and the most impacted was travel to certain areas (75 percent). While personal impacts to where someone lives, works or buys gas, were reported as showing lesser impacts in the surveys.

Figure C-1 – Personal Impact Questions



Most respondents indicated that they have continued to work the same hours in the same location. In the initial first few months of the 2008 closure, survey information showed a slight adjustment in commuter periods; however, most commuters soon return to more normal commute times and this trend continue in 2009.

Information Sources and Communication Methods

In 2009, TV News was considered to be the best method for MoDOT to delivery project information to the public by the respondents of the online survey. Again, based on this survey being an Internet-based survey, the percentage may have been higher when compared to other survey methods. The 2010 mail-out survey for example showed 39 percent of respondents selecting it as the best way to deliver information while the 2009 on-line showed Internet-based information delivery as 64 percent. Online respondents with access to the internet thought the internet was the second best way for MoDOT to provide information to them. Road signs, radio news and newspapers were also considered very good methods of communication.

Table C-4 – Communication Best Way Comparison

Best Way for MoDOT to Get Information to You	2008	2009
TV News	62%	73%
Internet Site	60%	64%
Radio News	51%	56%
Road Signs	43%	56%
Newspaper	43%	43%
Project email from MoDOT or I-64 Team	24%	26%
Radio Talk Shows	20%	20%
Receive Information in Mail	13%	15%
Project Display Boards at Public Events	11%	14%
Other	3%	3%

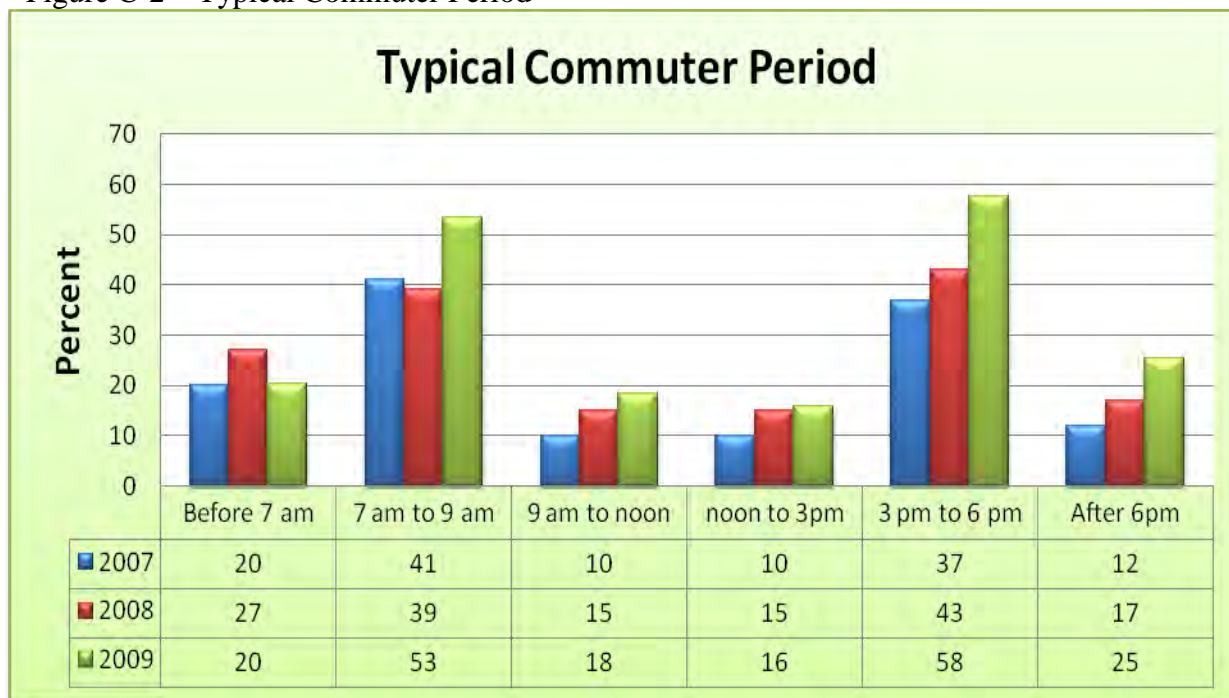
Alternative Routes

Respondents were initially (first six months of 2008) asked to provide input about eight alternative routes to gain a public perspective on what was considered the best alternative route. This information could then be used to correlate with information discovered in the mobility evaluation. I-44 was the most recommended route, with 41 percent of the respondents recommending it. Clayton Road and Ladue Road were the least recommended routes, in the sense that more respondents recommended against their usage than for them. From the mobility evaluation, the I-44 corridor continues to experience the greatest increase in traffic and correlates with information gained in the on-line survey in 2008.

Travel Time

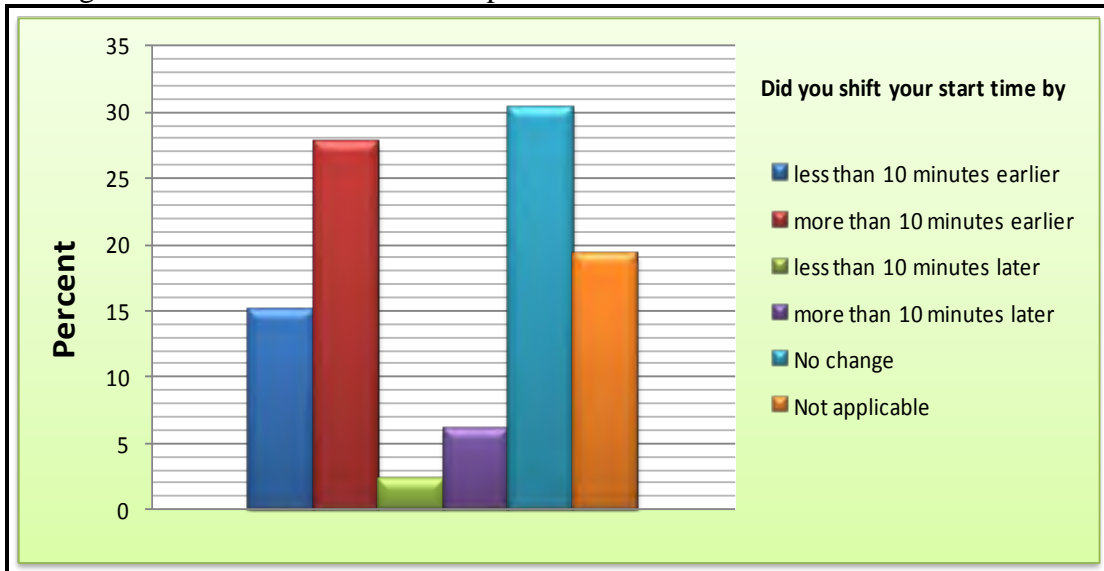
The travel time evaluation has shifted to the mobility and economic evaluations. In 2008, information was gathered on potential increase or decrease in travel time to gain the public perception. The majority of on-line survey respondents (58 to 78 percent) indicated that various trips had gotten longer since the closure, with a total of 9 to 12 percent responding that their trips had increased by 30 minutes or more. Notably, when asked specifically about work trips, 14 percent of respondents indicated that their work trips were actually faster than before. The response on this question regarding a potential shift in their typical commute period continues to provide respondents' perspectives that additional travel time was experienced. In 2009, it was observed that commute times shifted later in both the am and pm peak periods in Figure C-2.

Figure C-2 – Typical Commuter Period



In 2009, respondents were asked if they shifted their commute start times and Figure C-3 below shows the percentage based time and when from their response to this question “did you shift your commute start time by?”

Figure C-3 – Start Time Shift Response

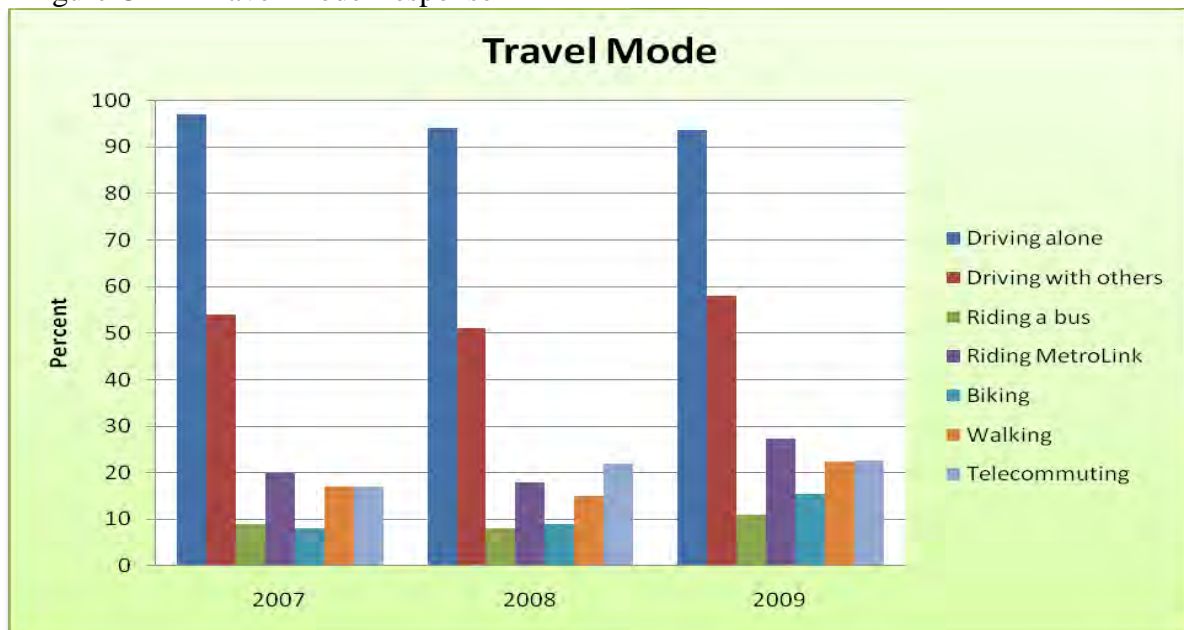


No change and not applicable represented 49 percent while starting more than 10 minutes early was 28 percent that present a somewhat opposite opinion to the display above when respondent stated that they started later in 2009.

Travel Modes

The on-line survey for 2007 (before) and 2008 and 2009 (closure period) revealed only slight changes in reported travel mode over the evaluation period, as illustrated below. Single-occupant driving has apparently slightly decreased by 2 to 3 percent, and carpooling (driving with others) also appears to have decreased in 2008 and increased in 2009. For other modes, the fluctuations are not stark, but there appears to have been some increase in each for 2009.

Figure C-4 – Travel Mode Response



Demographics

The Figures C-5 through C-8 below summarizes the responses to demographic questions from the respective surveys. One of the purposes of supplementing the Web survey with a mail survey was to reach populations without internet access, in order to ensure the research considered the input of as many groups as possible – a representative sample. By targeting the mail survey at many of the zip codes near the closure, the research team succeeded in its objective of reaching a more diverse population, especially in reaching more minorities and more females.

Figure C-5 – Survey Respondent's Age

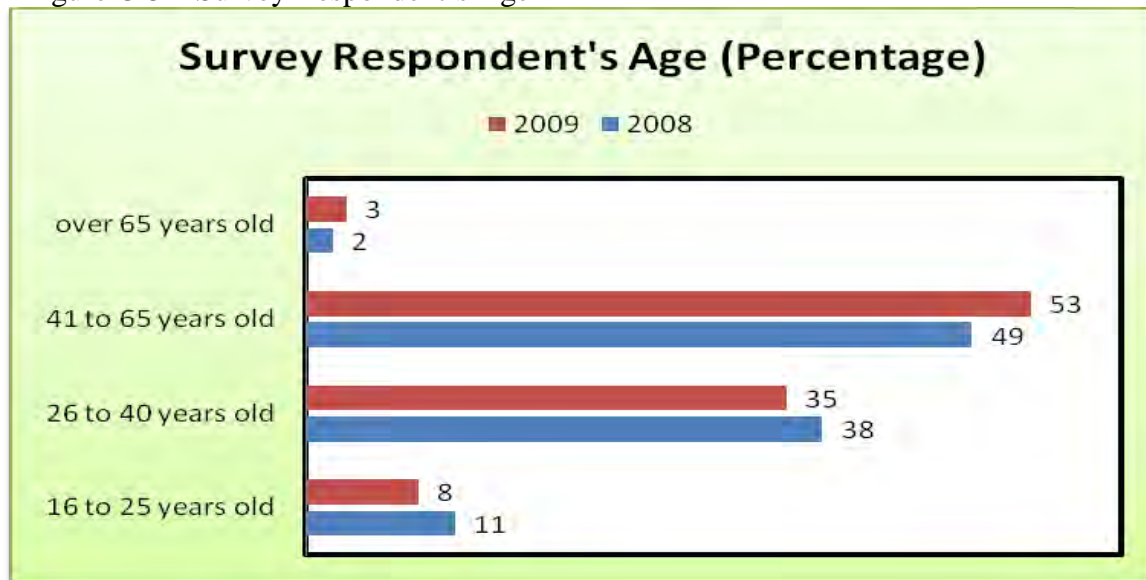


Figure C-6 – Survey Respondent's Gender

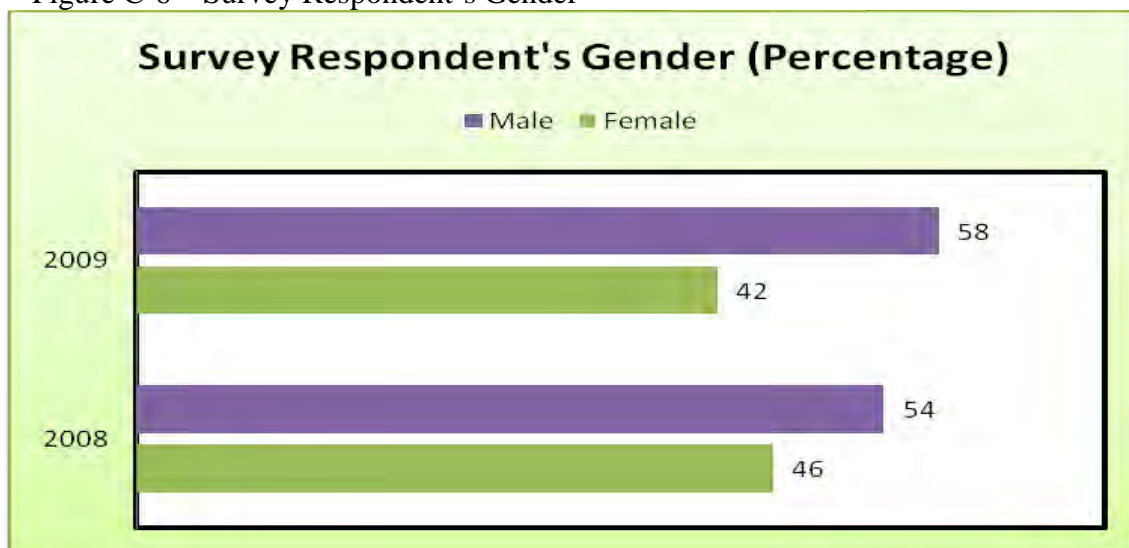


Figure C-7 – Survey Respondent's Race

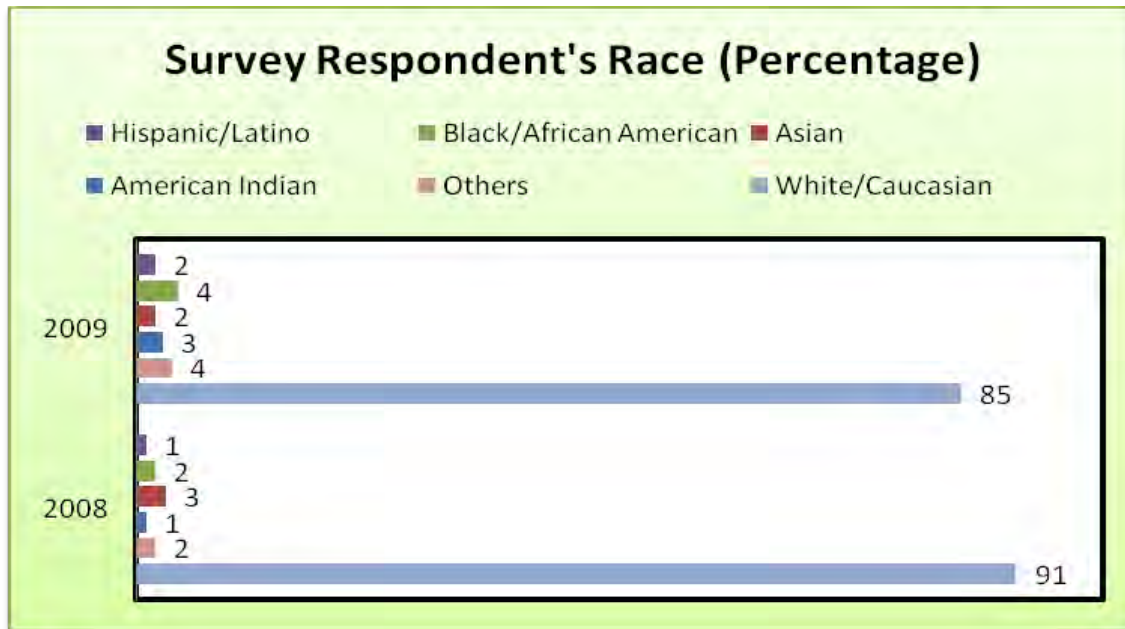
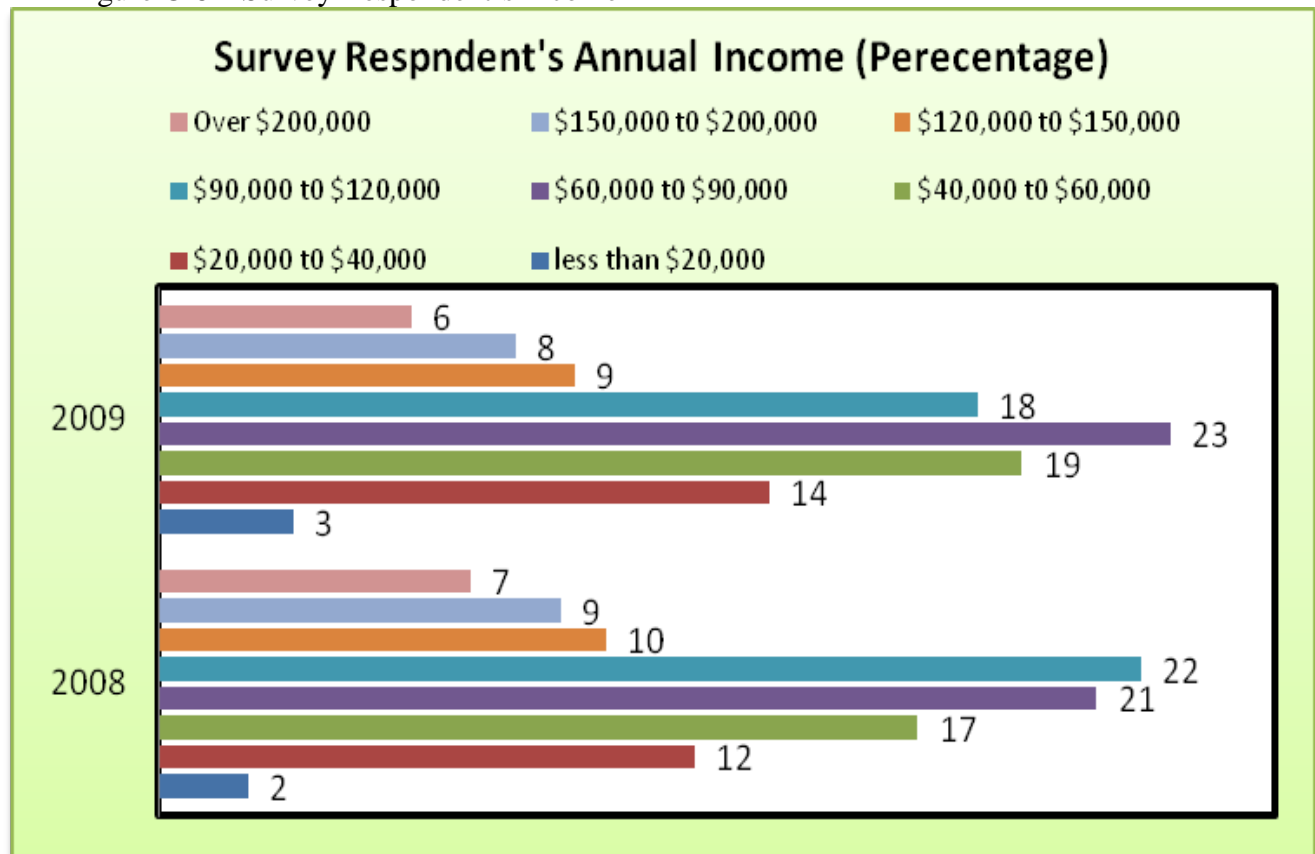


Figure C-8 – Survey Respondent's Income



Major Goals – Mobility Assessment

Assess the shifts (temporal, spatial, and modal) in travel demand throughout the region

Assess congestion effects of the closure

Assess closure effects on transit, ride-sharing, and park-and-ride demand.

Regional Mobility Discussion

This assessment uses a variety of tools to measure the region's mobility before, during, and after the construction and closure period. The assessment examines traveler shifts and their effects, using a multitude of data sources of varying resolution. The complexity and sheer size of the data set requires examinations at several levels to gain the most relevant information. The graphic display to the right shows both closures that occurred in 2008 and 2009.

Based on monthly and quarterly reports and field traffic monitoring completed during 2008, it was determined that limited mobility impacts were experienced along secondary facilities. Major facilities within the area described as Interstate 70 on the north; Interstate 44 on the south; and Route 141 on the west appeared to be impacted with similar diversion trends as the western closure. For each of these facilities, relevant mobility data (traffic volumes, travel times, incidents) was gathered based on available information. It should be noted that data collection along the regions roadway network was significantly less during the eastern closure than during the western closure. Experience gained by motorists during the western closure led to minimizing impacts and reduced the required monitoring of these corridors.

Mobility data was obtained through numerous sources:

- MoDOT collected limited traffic volume data along key major expressway and arterial facilities. Travel time runs along these roadways were conducted during the early days of the closure to enhance and adjust the regional traffic plan to accommodate mobility shifts and reduce mobility impacts. These runs were eliminated after the first few weeks of the closure. MoDOT also maintains statistics for its park-and-ride facilities across the state, and provided quarterly count data for its facilities in the region.
- Traffic.com is a national commercial traveler information service provider that works with state and local highway agencies in major metropolitan areas across the U.S., by providing real-time traffic information. Their data is based primarily on sensors placed throughout the major urban area by Traffic.com or the DOT agencies. Traffic.com archives traffic volumes, travel speeds, and vehicle classification (limited to their sensors) and produces travel times. They have agreed to share this information with the research team based on their original data-sharing agreement with MoDOT. The research team used the customized software routines developed during the western closure to collect and process significant amounts of data for use in this report. This source of data has been valuable in this study.
- St. Louis County conducted and provided traffic counts and travel-time studies on various regional arterials periodically during the eastern closure.
- RideFinders, sponsored by Madison County Transit, is the St. Louis regional rideshare program. Rideshare data has been provided on a monthly basis.

- The research team has supplemented data collection where necessary, including travel-time runs, traffic counts, and field observations.

Regional Mobility Results

Pre-closure Capacity Improvements

It is important to note that regional mobility began to be affected by the new I-64 project even before the closure. Perhaps most notably, several highway/roadway capacity improvements were implemented by MoDOT and St. Louis County on parallel and complementary facilities, as listed at right.

In addition to capacity improvements, temporary access management measures were also taken to increase traffic flow at or near key signalized intersections. Cross access (including left turns to and from key arterials) was prohibited to improve traffic flow, especially during the peak hours.

Key Improvements to Regional Highways/Roadways

I-70 Restriped from I-170 to I-270 (added lane in each direction)

I-44 Restriped from I-270 to I-55/I-70 (added lane in each direction)

I-270 Restriped from I-64 to Olive (added lane in each direction)

I-270/I-64 Restriped interchange ramps to improve traffic flow (revised during 2008)

I-270/I-44 Restriped interchange ramps to improve traffic flow

Clayton Road Restriped from Mason Road to Lindbergh Blvd; upgrade various traffic signals; new traffic signals at Topping Road and Bopp Road

Ladue Road Upgraded various traffic signals; various new left/right-turn lanes; new traffic signals at Graeser Road/Warson Road

Improved Signal Timing along Page Avenue, Olive Boulevard, Manchester Road, Lindbergh Boulevard, Clayton Road, Brentwood Boulevard, Hanley Road, Big Bend Boulevard, Kingshighway Boulevard, Grand Boulevard, and Forest Park Parkway

Crash reconstruction sites were located and marked along interstate facilities to assist in traffic incident management activities. These sites provided a safe location for police to work non-injury crashes while maintaining freeway traffic-handling capacities. The research team discussed the utilization of these sites with MoDOT staff and found that their utilization was limited based on several factors like size of the site, location of the site, and education of the motorist and the responding emergency service providers.

Traffic Volumes

A key task included as part of this research project was the development of a series of systems to automate the collection, processing, and display of the enormous stream of available data. The graphics included in this section of the report were created using these systems. The research team developed a Macro using an Excel spreadsheet, and later using an SQL database application, to search the Traffic.Com traffic database for specific traffic-related data for each highway segment of interest.

Prior to the closure, in baseline 2006, I-64 carried approximately 170,000 vehicles per day (vpd) on a typical weekday in heaviest segment – this is Annual Average Daily Traffic, or AADT (excluding “outlier” days). In January-February of 2007, one year before the closure, the Eastern section of I-64 carried approximately 143,000 vpd on a typical weekday. This initial shift was potentially or partially caused by the anticipation of the construction along I-64. Travelers finding an early alternate route or beginning other travel demand opportunities (like reduction or combining trips, transit, etc.). One hundred (100) percent of this traffic was necessarily displaced (temporally and/or spatially) as a result of the closure.

One primary question of interest is, “where did all the traffic go?” Several sources have been used to determine the most appropriate answer to this question - including before/after volumes (from MoDOT, Traffic.com, and St. Louis County), responses to the various public surveys developed, and selected aggregated data reported by MoDOT in its frequent e-mail briefings. The project team summarized and analyzed roadway data based on the interstate, major expressway and major arterials approach. The following discussion highlights the trends in traffic volume, travel speeds, and travel time observed during the eastern closure.

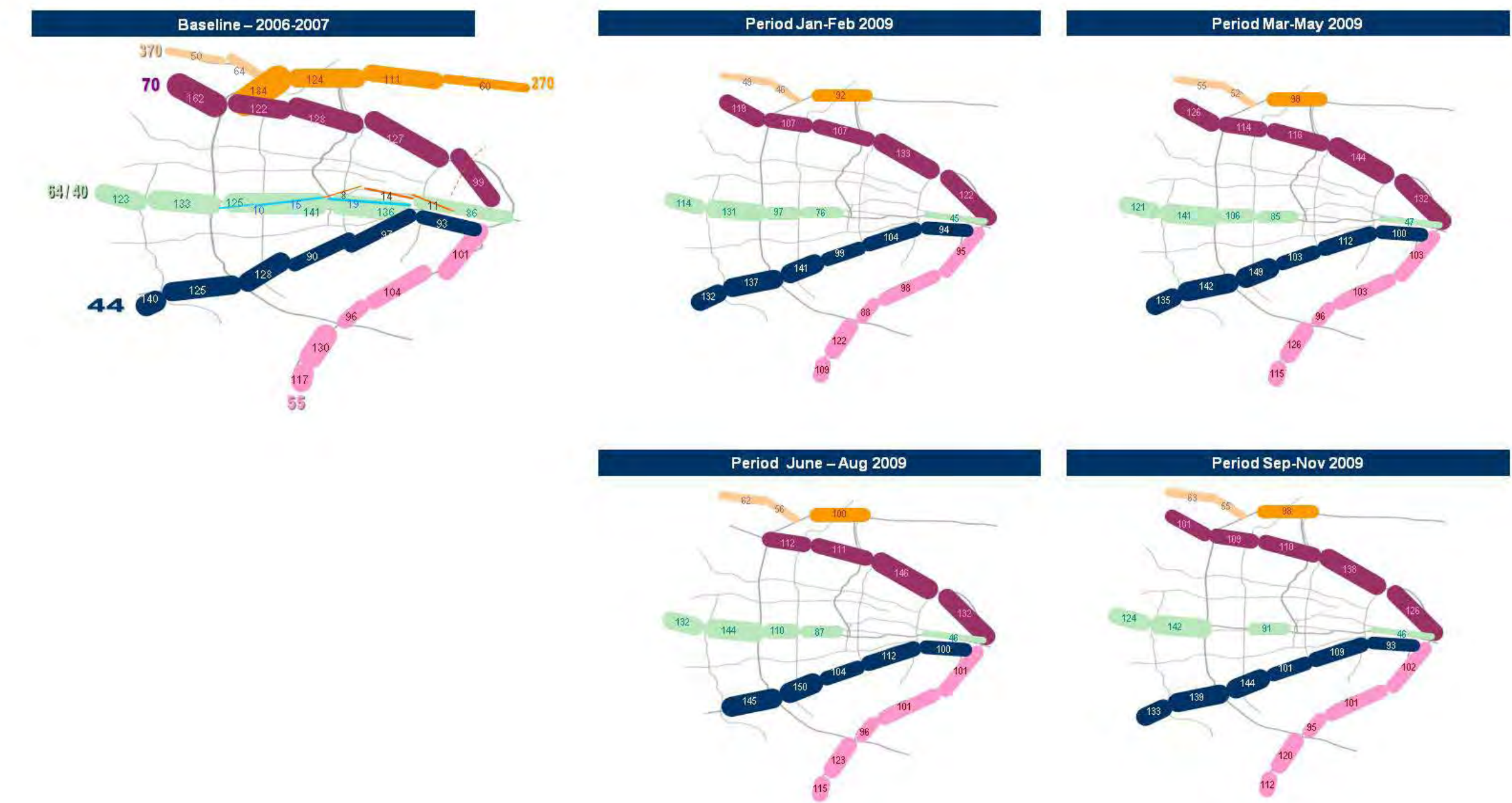
The graphs on the following pages (Figures M1 through M6) include a detailed summary of several freeway and arterial roadways. It is important to note that this summary is based on average traffic conditions for Tuesdays, Wednesdays and Thursdays. This average traffic conditions excluded every holiday, weekend and “outlier” weekday (Mondays and Fridays) from the available data sets. These graphs compare 2009 to 2007 traffic data.

Based on these graphs, the following preliminary conclusions can be gleaned:

- Volumes along I-64 west of I-270 increased by approximately 8,000 to 11,000 vehicles per day vpd) beginning in March. West of I-270, traffic volumes ranged from 85,000 to 110,000 vpd also beginning after March. It appears that western pre-closure regional traffic patterns took a couple months to return after the opened western section of I-64 in early 2009.
- Based on the Traffic.com data, it appears that volumes along I-70 decreased west of I-170, but increased east of I-170 by 20,000 to 30,000 vpd. This shift in traffic would be expected based on the eastern closure of I-64.
- Traffic volumes along I-270 south of I-64 have increased by 30,000 to 40,000 vehicles per day. This trend also occurred during the western closure and demonstrates the use of the designate alternate routing of I-270 to I-44. Also, I-270 north of Page experienced an increase of 20,000 to 30,000 vpd. The only plausible explanation is the baseline 170,000 was low, based on the period after the opening of Page Extension in the mid-2000 when traffic moved to Page from I-70 going to and from St. Charles County. It appears that traffic patterns have adjusted back.
- I-44 became a key alternative east-west route with increases in traffic volumes ranging from 22,000 vehicles per day east of I-270 at Lindbergh Blvd to 7,000 vehicles per day near Jefferson Ave.
- I-170 became a key route that connected several of the arterial roadways throughout the region. South of Page Avenue, volume increases of 15,000 vehicles per day were observed. Just north of I-64, volume increases of around 7,000 vpd were observed.
- Travel speeds and travel times along the region’s freeway network have dropped slightly in conjunction with slight increases in traffic volumes.
- Parallel arterial routes also experienced significant increases in traffic volumes and travel times. East-west arterial corridors closely located along the I-64 corridor like Clayton Road and Ladue Road, maintained increases east of Hanley Road. Traffic volumes along these roadways, west of I-170, dropped to their pre-closure traffic volumes.

- East of Hanley Road, Forest Park Parkway experienced an increase of approximately 15,000 vpd. West of Big Bend, volumes dropped closer to those prior to the closure of the western segment.

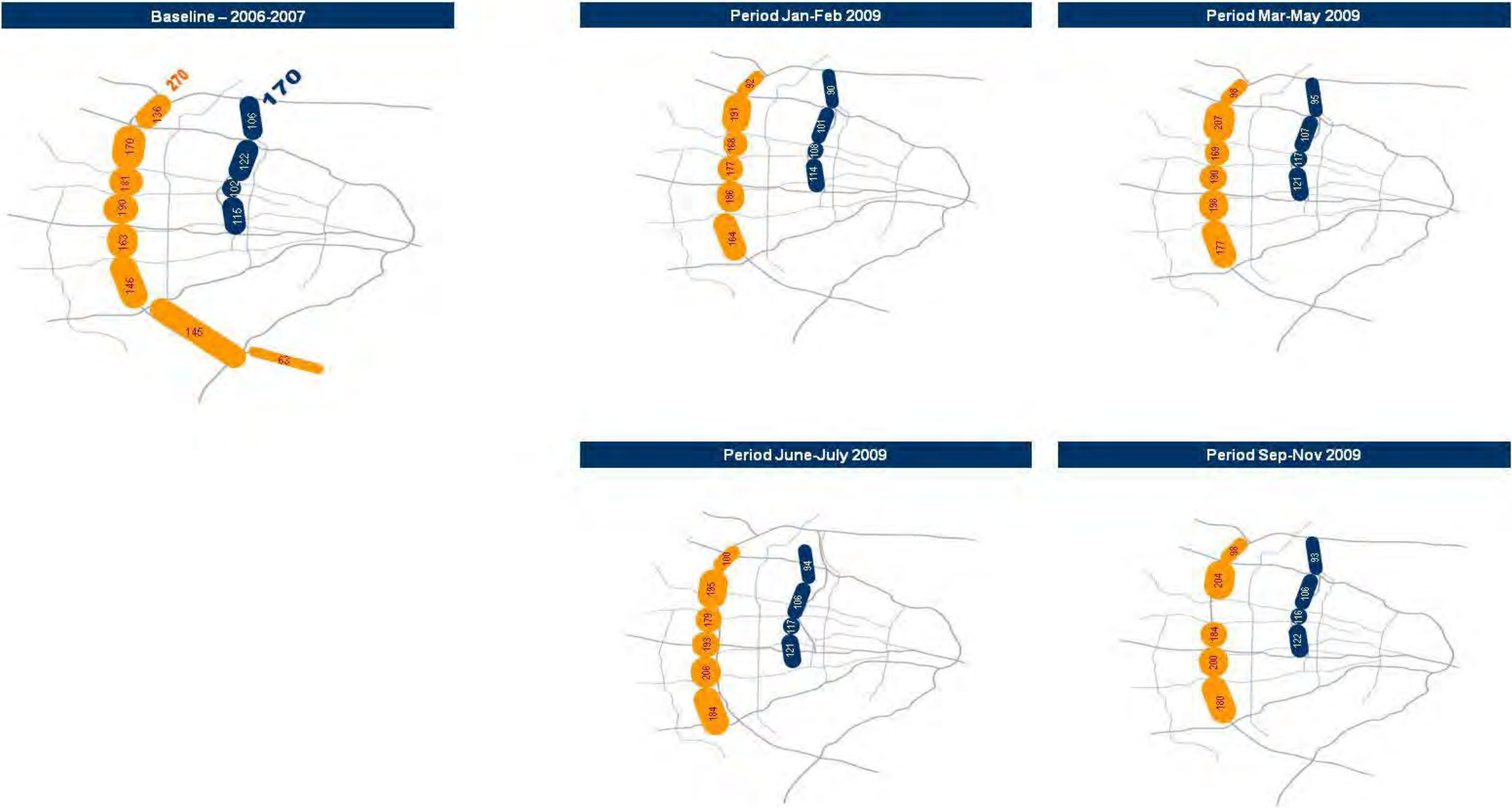
Figure M1 – Summary of Traffic Flow – East-West Routes (Traffic volumes for shown segments in thousands vehicles per day)



Source Traffic.Com

The New I-64 Economic and Regional Mobility Study
Annual Report – 2009
Figure M1 – Summary of Traffic Flow – East/West Routes

Figure M2 – Summary of Traffic Flow - North-South Routes (Traffic volumes for shown segments in thousands vehicles per day)



Source Traffic.Com

*The New I-64 Economic and Regional Mobility Study
Annual Report – 2009
Figure M2 – Summary of Traffic Flow – North/South Routes*

Figure M3 – Summary of Hourly Traffic Flow (in vehicles per hour)

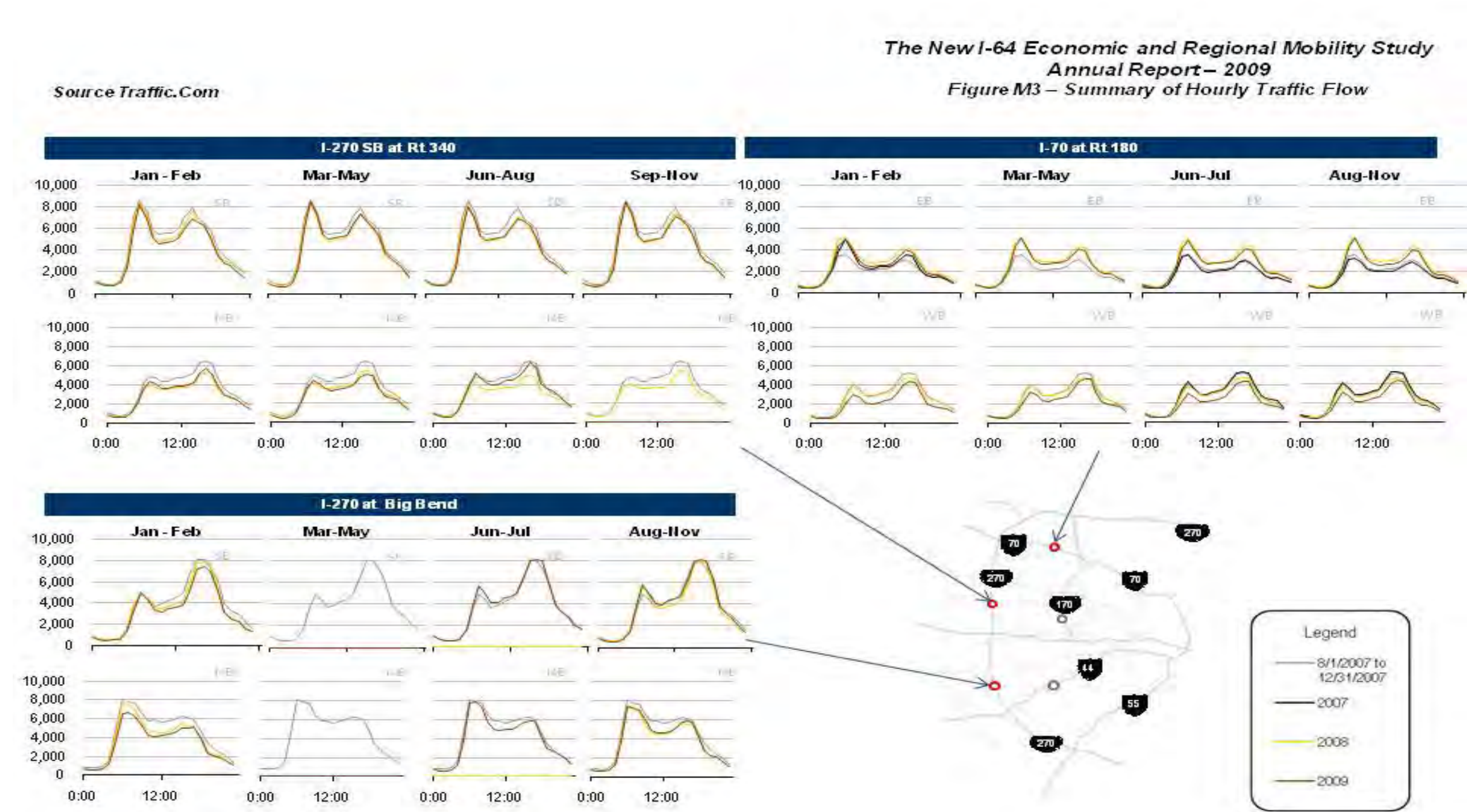


Figure M4 – Summary of Hourly Traffic Flow (in vehicles per hour)

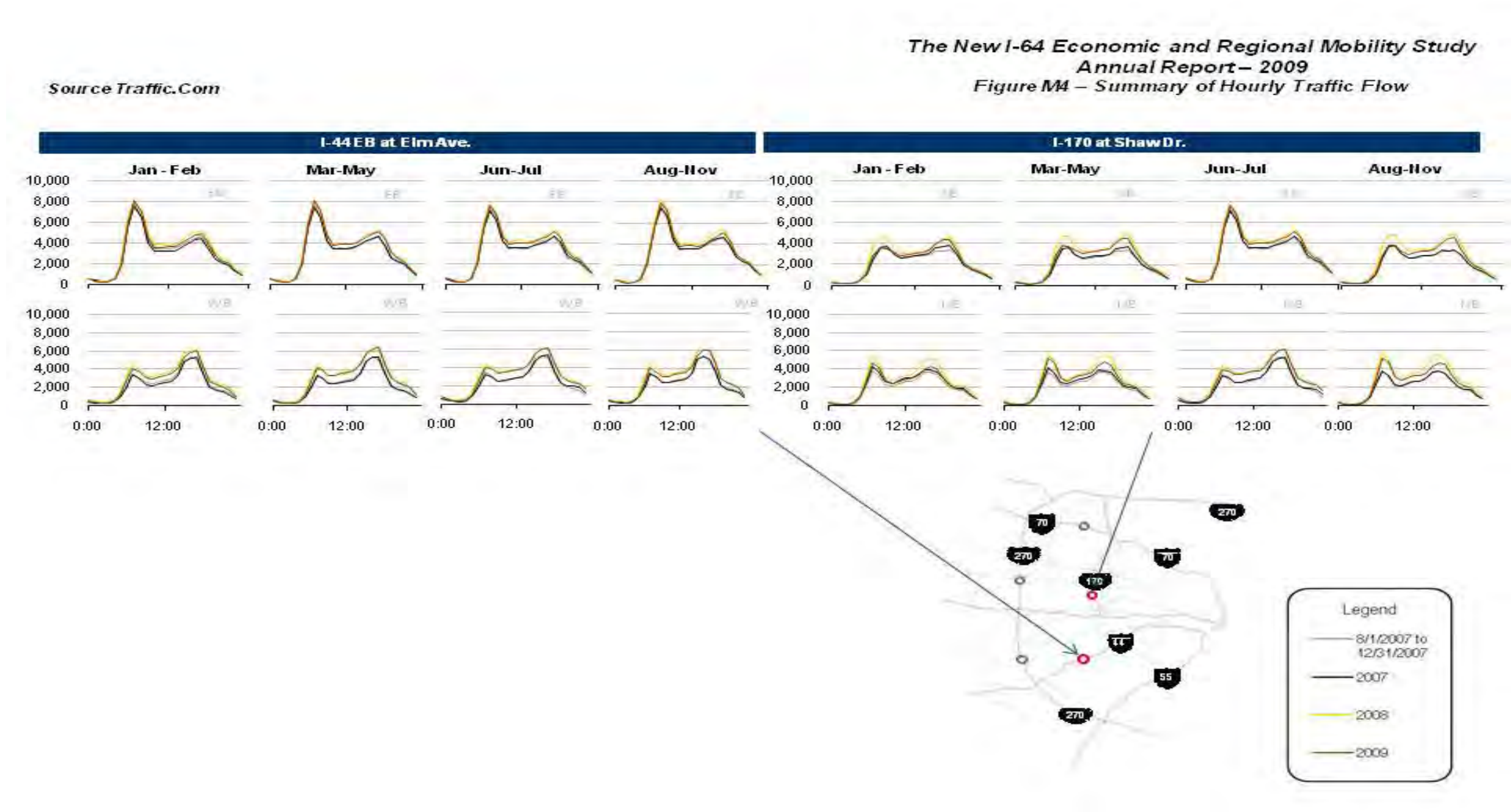
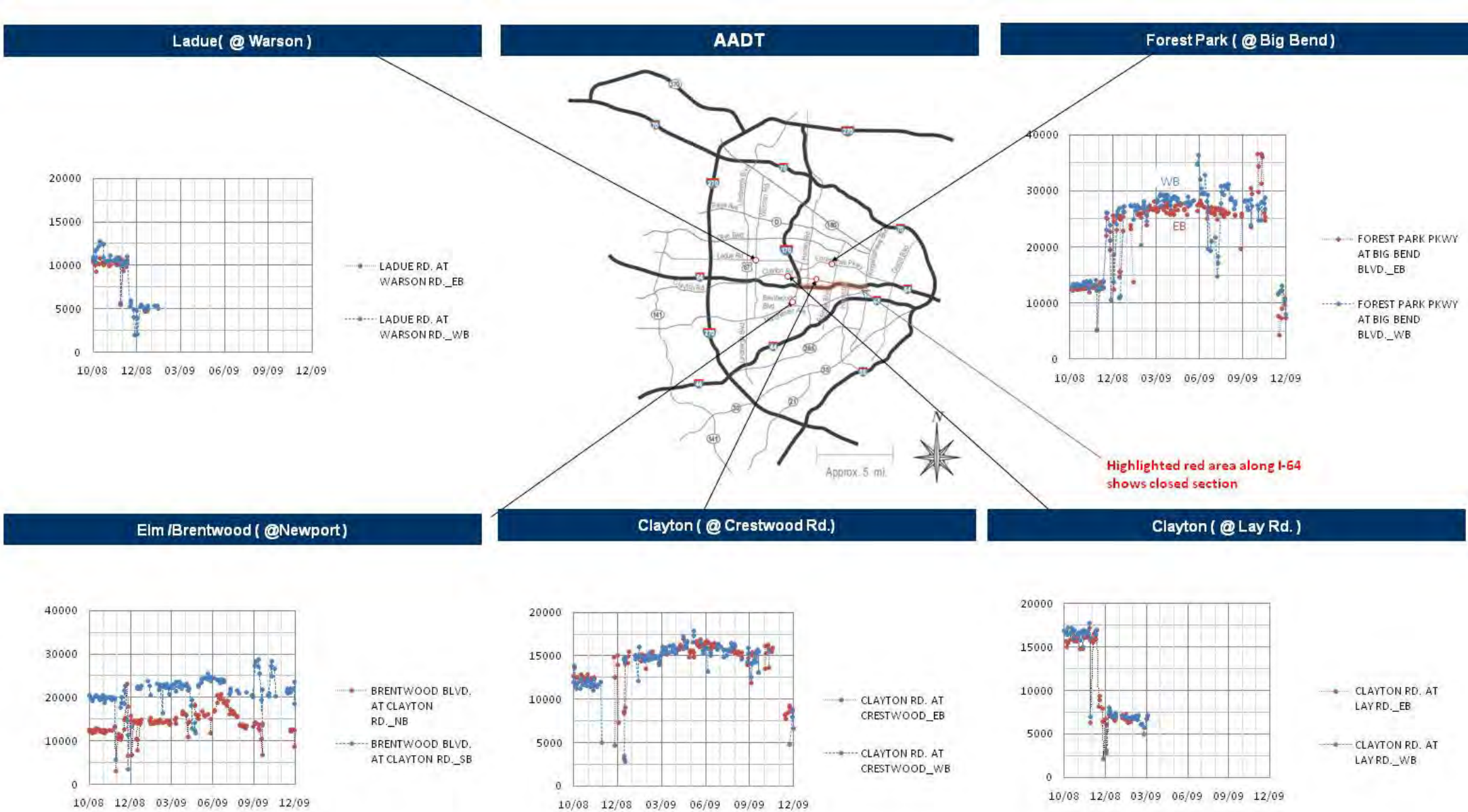


Figure M6 – Summary of Arterial Traffic Flow (in vehicles per day)
Source St. Louis County and MoDOT



The New I-64 Economic and Regional Mobility Study
Annual Report – 2009
Figure M6 – Summary of Arterial Average Daily Traffic Data

Average Speeds

Average speeds were obtained from freeway detection sites (source Traffic.com) based on a one-minute resolution level. Average speed is an indication of how well traffic is flowing and can be an indicator of traffic congestion or an incident/event occurrence. For purposes of this study, average speed is also used in the determination of travel time along the freeway network. Generally, travel time performance measurement is better understood by the general public, since it is how most travelers or commuters measure their trips.

Travel speed was measured using an average daily profile. Speed at low traffic volumes will be closer to the free-flow speed or speed limit of the highway segment (an upper horizontal straight line is the typical free flow speed). Profiles dipping below this line show traffic slowing due to traffic volume increases or incidents. Figures M7 and M8 on the following pages include a detailed summary of five spot locations along I-270, I-70, I-44 and I-170. It is important to note that this summary is based on average traffic conditions for Tuesdays, Wednesdays and Thursdays. These traffic conditions excluded every holiday, weekend and “outlier” weekday (Mondays and Fridays) from the available data sets. It should also be noted that baseline 2007 data was not available along all roadways. Based on these graphs, the following preliminary conclusions can be gleaned:

- In general, travel speeds for the eastern closure were similar to, or higher than, those observed during the western closure.
- Drivers along WB I-44 experienced an increase in travel speeds of between 10 and 13 mph. This is most likely due to the return of traffic from I-44 to I-64.
- Travel speeds along I-70 generally increased east of I-170.
- Travel speeds along I-170 south of Shaw Park increased to values higher than those observed during 2007. This is most likely related to the improved design of the I-64/I-170 interchange.

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Figure M7 – Summary of Hourly Travel Speeds (in miles per hour)

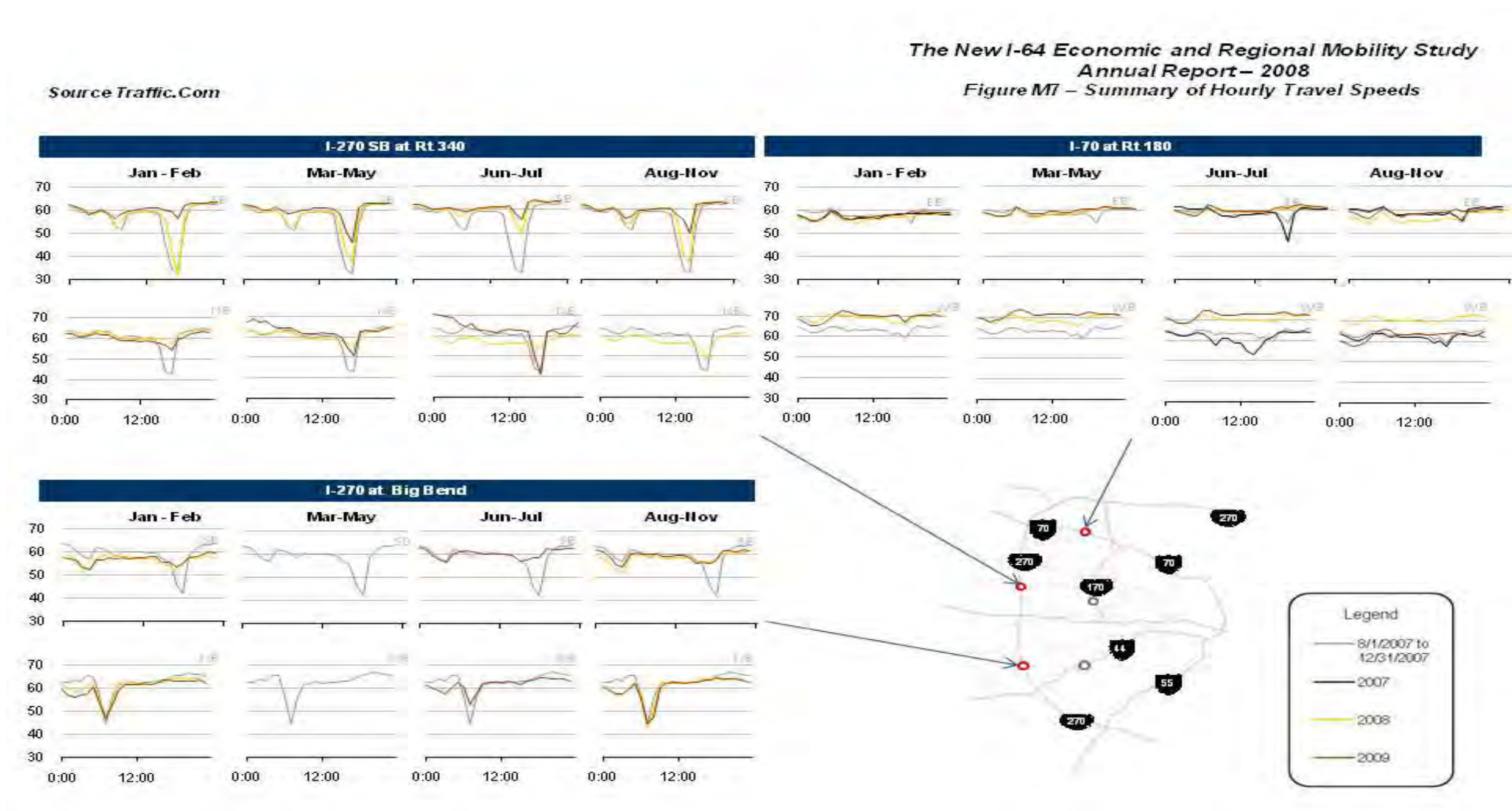
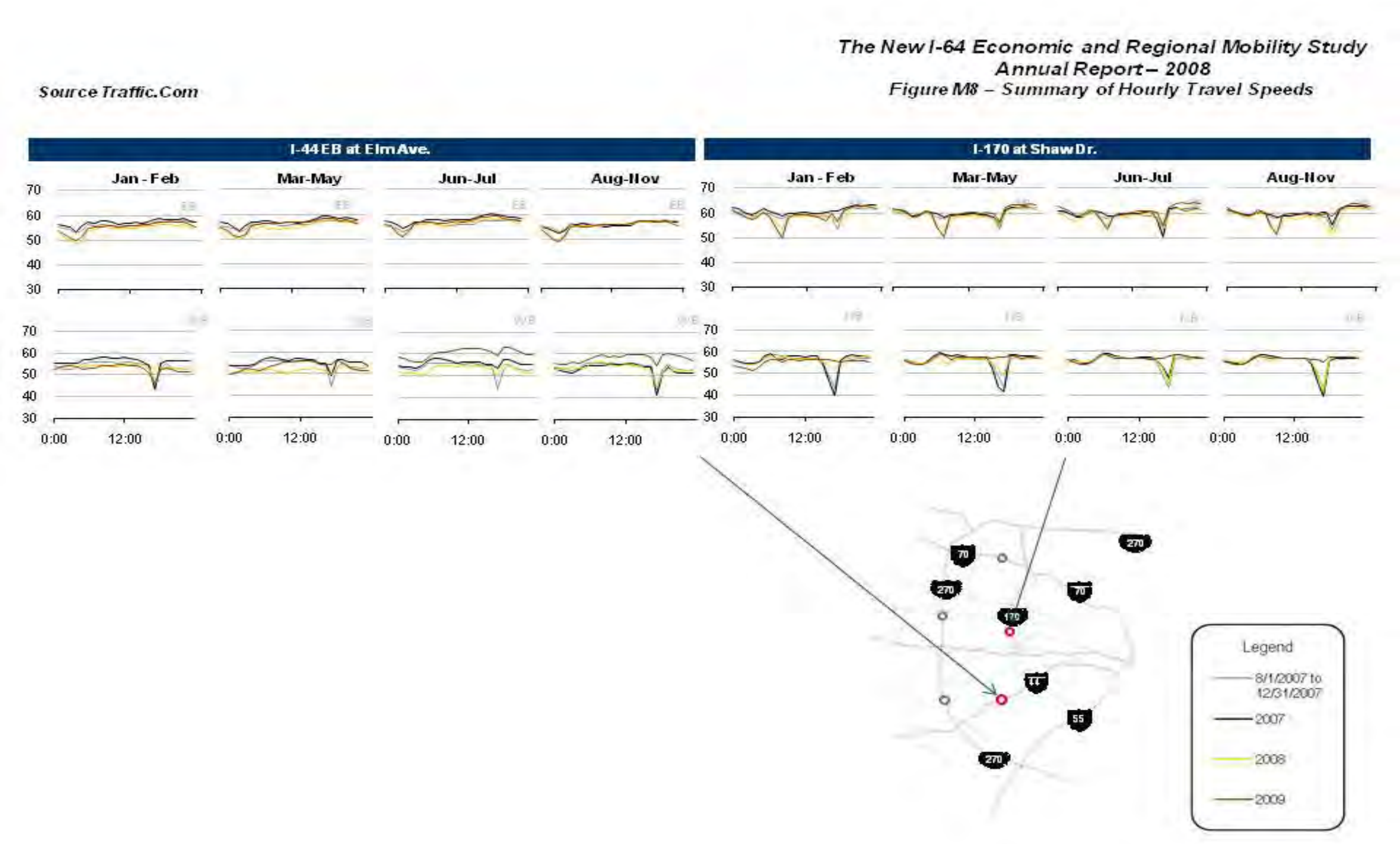


Figure M8 – Summary of Travel Speeds (in miles per hour)



Travel Times

Travel times along the freeway interstate network were calculated using the average travel speeds that were obtained from Traffic.com. Travel time statistics, as mentioned above, are a more “traveler- friendly” performance measurement, since most travelers or commuters measure their trips based on the time it takes to get from one location to the next. Travel times related to the time it takes a driver to get from one point to another point (e.g., along I-270 from I-64 to I-44 was 5 minutes during the morning peak period). Comparison of pre-construction (known as baseline), construction and post-construction periods will provide a better insight into impacts related to traveling during construction, as well as the future value gained from the constructed improvements. Table M1 depicts a summary of twelve freeway segments within the St. Louis region. The pink shaded ratios indicate an increase in travel time, while the green shaded indicate a decrease in travel time. Travel Time Index is the ratio of 2009 Travel Time compared to 2007 Travel Time (baseline). In general, **interstate travel time values were less than the 2007 travel times with only 4 segment/periods out of 95 segment/periods showing an increase in travel time.**

Table M1 – Summary of Freeway Travel Time (Source Traffic.com)

		Travel Time (min)					Travel Time Index			
		8/1/2007	1/1/2009	3/1/2009	6/1/2009	9/1/2009	1/1/2009	3/1/2009	6/1/2009	9/1/2009
Road Segment	Distance (mi)	12/31/2007	2/28/2009	5/31/2009	8/31/2009	11/30/2009	2/28/2009	5/31/2009	8/31/2009	11/30/2009
1. I-70 EB from I-270 (Exit 232) to I-170 (Exit 238)	5.8	5.6	5.3	5.3	5.3	5.4	0.944	0.947	0.933	0.959
2. I-70 WB from I-270 (Exit 232) to I-170 (Exit 238)	6.1	6.3	5.8	5.6	5.5	6.1	0.911	0.889	0.873	0.963
3. I-170 NB from I-70 to I-64/US 40 (Exit 0)	7.6	8.3	7.8	7.7	7.6	7.8	0.942	0.928	0.917	0.941
4. I-170 SB from I-70 to I-64/US 40 (Exit 0)	7.7	7.7	7.5	7.4	7.4	7.4	0.977	0.970	0.967	0.969
5. I-270 NB from I-70 (Exit 20) to I-64 (Exit 12)	7.7	8.9	7.3	7.5	7.6	-	0.826	0.841	0.855	-
6. I-270 SB from I-70 (Exit 20) to I-64 (Exit 12)	7.6	8.8	7.6	8.0	7.7	7.9	0.864	0.905	0.880	0.896
7. I-270 NB from I-64 (Exit 12) to I-44 (Exit 5)	6.5	7.3	6.4	6.9	6.7	6.7	0.878	0.944	0.920	0.928
8. I-270 SB from I-64 (Exit 12) to I-44 (Exit 5)	6.6	12.7	8.8	9.8	10.4	10.0	0.696	0.770	0.820	0.790
9. I-44 EB from I-270 to Kingshighway (Exit 287)	10.5	11.3	10.5	10.5	10.2	10.5	0.932	0.933	0.908	0.931
10. I-44 WB from I-270 to Kingshighway (Exit 287)	10.5	11.6	11.5	10.9	10.3	10.7	0.987	0.939	0.887	0.919
11. I-64 EB from Rte 141 (Exit 22) to I-270 (Exit 25)	3.3	3.7	3.5	3.7	3.7	3.8	0.939	0.992	0.987	1.026
12. I-64 WB from Rte 141 (Exit 22) to I-270 (Exit 25)	3.3	3.7	3.6	3.5	3.4	3.8	0.975	0.956	0.922	1.035
		Travel Time (min)					Travel Time Index			
		8/1/2007	1/1/2009	3/1/2009	6/1/2009	9/1/2009	1/1/2009	3/1/2009	6/1/2009	9/1/2009
Road Segment	Distance (mi)	12/31/2007	2/28/2009	5/31/2009	8/31/2009	11/30/2009	2/28/2009	5/31/2009	8/31/2009	11/30/2009
1. I-70 EB from I-270 (Exit 232) to I-170 (Exit 238)	5.8	5.6	5.4	5.6	5.8	5.5	0.956	0.985	1.019	0.968
2. I-70 WB from I-270 (Exit 232) to I-170 (Exit 238)	6.1	6.3	5.9	5.8	5.7	5.7	0.940	0.927	0.901	0.901
3. I-170 NB from I-70 to I-64/US 40 (Exit 0)	7.6	8.3	7.2	7.8	7.1	7.2	0.868	0.932	0.850	0.866
4. I-170 SB from I-70 to I-64/US 40 (Exit 0)	7.7	7.8	7.6	7.8	7.3	7.7	0.974	0.994	0.933	0.985
5. I-270 NB from I-70 (Exit 20) to I-64 (Exit 12)	7.7	9.2	8.0	8.1	8.0	8.3	0.873	0.876	0.872	0.907
6. I-270 SB from I-70 (Exit 20) to I-64 (Exit 12)	7.6	9.8	9.2	8.9	7.8	8.8	0.947	0.916	0.800	0.903
7. I-270 NB from I-64 (Exit 12) to I-44 (Exit 5)	6.5	7.3	6.3	6.8	6.6	6.7	0.867	0.937	0.904	0.926
8. I-270 SB from I-64 (Exit 12) to I-44 (Exit 5)	6.6	12.7	10.6	10.6	9.6	9.8	0.840	0.838	0.757	0.774
9. I-44 EB from I-270 to Kingshighway (Exit 287)	10.5	11.5	10.9	10.8	10.5	10.7	0.949	0.940	0.917	0.930
10. I-44 WB from I-270 to Kingshighway (Exit 287)	10.5	12.0	12.0	11.9	11.6	12.2	0.999	0.990	0.967	1.015
11. I-64 EB from Rte 141 (Exit 22) to I-270 (Exit 25)	3.3	3.7	3.5	3.5	3.5	3.5	0.946	0.953	0.946	0.943
12. I-64 WB from Rte 141 (Exit 22) to I-270 (Exit 25)	3.3	3.7	2.9	2.9	3.0	3.0	0.788	0.790	0.806	0.807

Traffic.com provides a map display of traffic conditions including information such as congestion levels, speed and travel time for any specific segment. Additionally, drivers could sign up to receive email alerts of traffic conditions for specific roadway segments at predetermined time periods. For example “Eastbound Page between I-270 and I-170 at 7:00 AM” would be a user defined route during a specific period.

Travel times for key major arterials were also collected and summarized. Four segments within close proximity to the closure were chosen for studying the travel-time impacts of the I-64 eastern closure. Email alert travel time data was collected at specific times during both the AM peak (7:00 or 7:30 AM) and PM peak (5:00 PM) periods. These email alerts were collected for Monday through Friday for the first 6 months of 2009 and Tuesday through Thursday for the last six months of 2009. From travel times conducted by both agency staff and the research team before the closure, baseline travel times were developed for comparison. The segments are as follows;

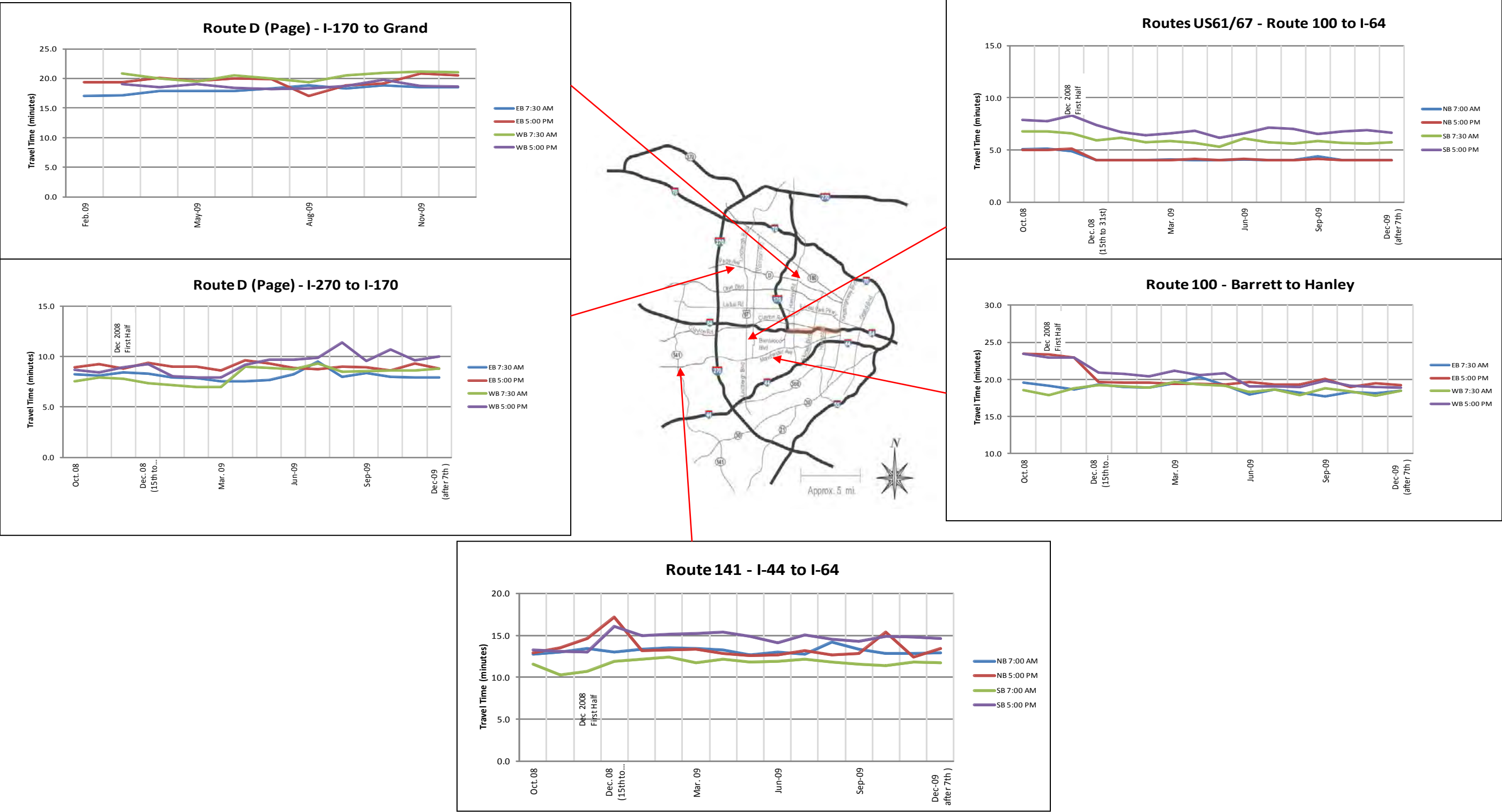
- Lindbergh Boulevard: Between Route 100 and US 40/I- 64 (2.45 miles)
- MO 141: Between US 40/I-64 and I-44 (7.5 miles)
- Page Avenue: Between I-270 and I-170 (5.5 miles) & I-170 and Grand Avenue (7.55 miles)
- Manchester Road: Between Barrett Station Road and Hanley Road (7.95 miles)

To insure and validate the data being collected through the Traffic.com website was accurate, the team monitored Traffic.com data while project team members conducted actual travel time runs along the selected roadway segments in 2008. The observed differences were around 1 minute between the Traffic.com data sets and the observed field results, validating the Traffic.com data for use in this study.

Figure M9 depicts the average travel times during various months in 2008 and 2009.

In general, travel times increased, but not significantly. Travel times along Page Avenue actually dropped. This was most likely due to the additional through lane that was added prior to the closure and the signal timing improvements implemented.

Figure M9 – Travel Time along Selected Major Arterial Roadways (Source Traffic.com)



Based on the travel time data, the following preliminary conclusions can be gleaned:

- Average travel times along northbound Route 141 increased slightly. The maximum travel times, however, were significantly higher than the pre-closure travel times.
- Average travel times along westbound Manchester at the beginning of the PM peak hour increased rather significantly, but generally decreased during the five to six o'clock timeframe.
- Page Avenue experienced higher average travel times during the AM peak hour and similar travel times during the PM peak hour.
- Ladue Road and Clayton Road experienced higher average travel times when compared to the pre-closure. Since traffic on these roadways increased significantly, this was not a surprise to the project team.

In general, increases in post-closure travel time runs were observed along several of the corridors. This, most likely, could be due to a significant increase in traffic volumes using these facilities. These conditions could have been significantly worse, if not, for the planned and implemented improvements in the region's signal timing and coordination efforts to address anticipated increases in traffic volumes. It should be noted that collaboration between local and state agencies was a critical factor in maintaining acceptable traffic flow. The public appeared to notice these improvements, based on survey responses received.

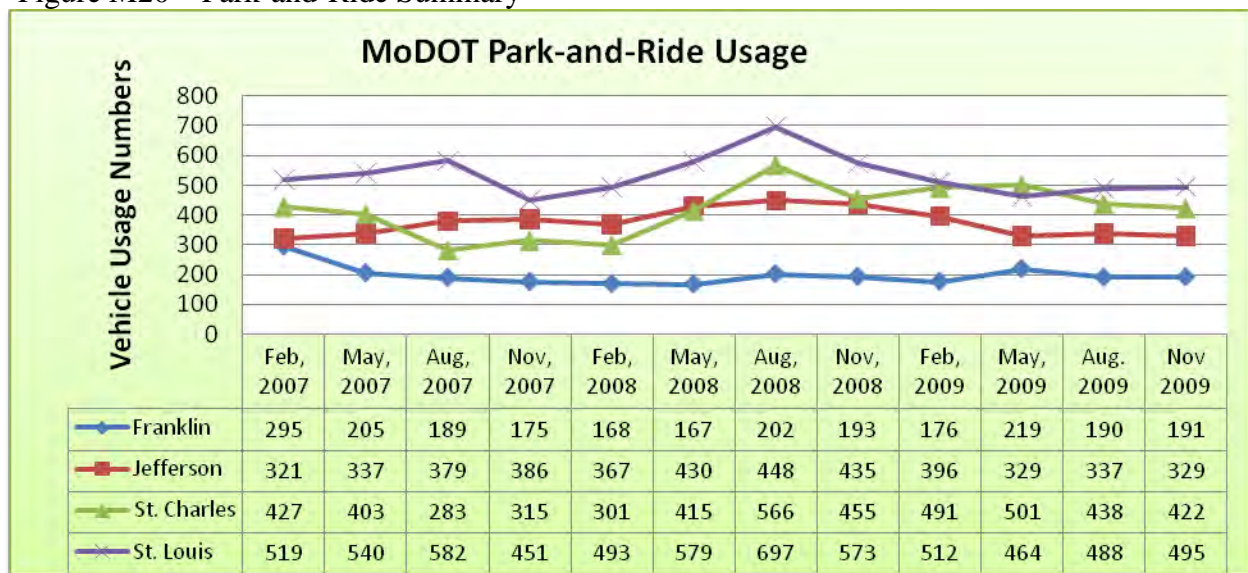
Park-and-Ride

Figure M20 below summarizes both baseline year 2007 and construction years of 2008 and 2009 based on quarterly usage counts at MoDOT's Park-and-Ride lots in St. Louis County and neighboring counties. As the display below indicates, a downward and stabilizing trend from mid-year 2008 were experienced in St. Louis, Jefferson and St. Charles Counties. This increase could be somewhat related to gas prices and/or the economic downturn in 2008. Franklin County was stable after a downward trend in early 2007.

The construction and closure along I-64 may have had a limited impact on park-and-ride usage, since the 1st quarter in 2008 actually showed a decrease when concerns of the closure's impact were at their peak. The rise in mid-year 2008 was probably more caused by gas prices (near \$4 per gallon) and the economy than the closure of I-64. In 2009, the park-n-ride usage returned to similar levels experienced before the closure of I-64 in 2007.

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Figure M20 – Park-and-Ride Summary



Rideshare

RideFinders, sponsored by Madison County Transit, is the St. Louis regional rideshare program. The figures shown below labeled M21 and M22 were developed from historical ridership information from RideFinders. In general, the graphs indicate a general upward trend since the second half of 2007 through the latter part of 2008. As previously mentioned, these increases could be due in part to gas prices and the economic down-turn in addition to the New I-64 construction project.

Figure M21 Carpool Summary

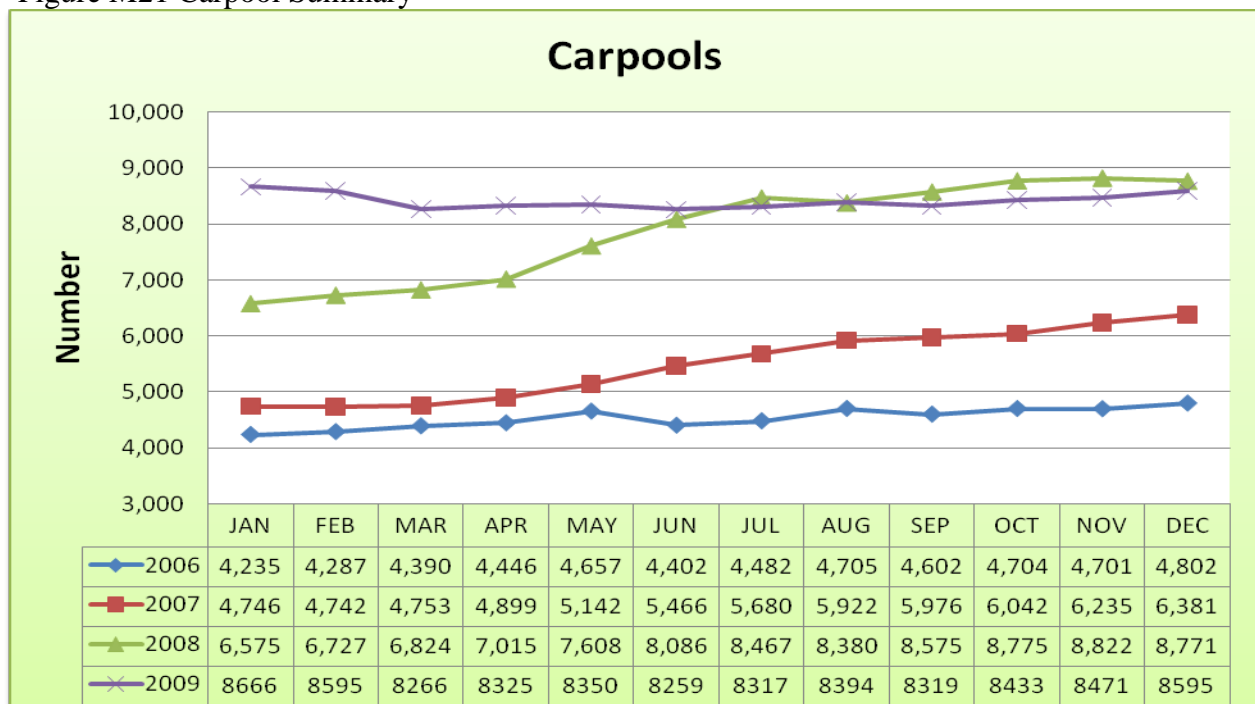
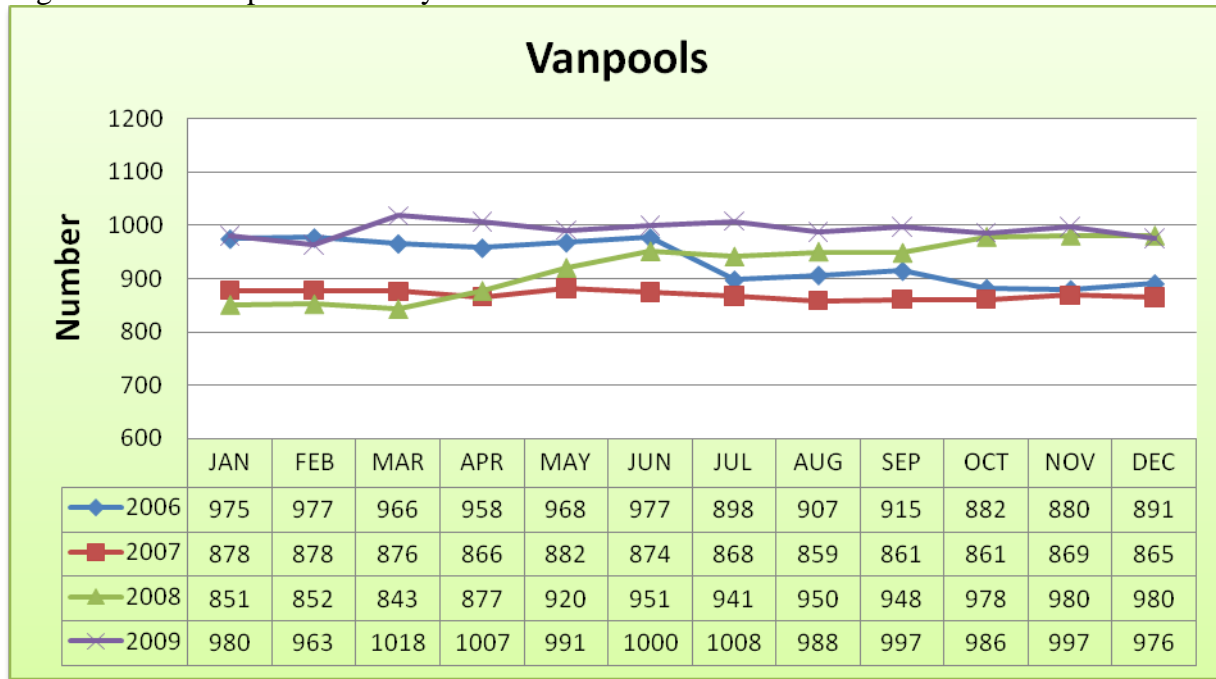


Figure M22 – Vanpool Summary



Roadway Safety – Discussion

On January 2, 2008, the Missouri Department of Transportation (MoDOT) closed I-64 for reconstruction purposes. During the planning stages of this reconstruction project, the plan for a total closure was met with concern, inciting questions from the general public like: Could closing the roadway possibly contribute to more (or less) crashes than before on adjacent roadways? And, if noticeable changes existed in the number and types of crashes, are the changes due to closing I-64 or other influencing factors?

This 2009 Annual Report and its companion 2008 Annual Report aims to answer these questions by examining crash data before and during the closure, and by providing objective explanations to the changes if any. This study retained the same analysis approach conducted in 2008 by conducting two separate analyses (Crash Analysis and Crash Rate Analysis). The following presents the main findings from the two analyses with the inclusion of 2009 crash information:

Crash Analysis:

The research team was provided 6 years (2004-2009) worth of crash data that included all crashes that had occurred on 17 area adjacent roadways including I-64. Using this crash data, the 2-year closure period crashes (2008 and 2009) were compared to the 4-year pre-closure period crashes (2004 through 2007). Figures S-1 through S-3 show the trend in total crashes for the various roadways identified as roadways that could be potentially impacted by the I-64 construction project.

Roadway Safety - Results

Comparisons were based on average crashes for the 4-year pre-closure period compared to the 2-year closure period:

Freeways:

- 2008 - Increase in crashes for I-44 (5 percent), I-55 (4 percent) and I-70 (8 percent)
- 2008 - Decrease in crashes for I-64 (52 percent), I-170 (6 percent) and I-270 (6 percent)
- 2009 – Increase in crashes for I-70 (16 percent) only
- 2009 – Decrease in crashes for I-44 (19 percent), I-55 (8 percent), I-64 (73 percent), I-170 (33 percent) and I-270 (19 percent)

Expressways:

- 2008 - Increase in crashes for Route D (2 percent) only
- 2008 - Decrease in crashes for US 40 (35 percent), US 61 (8 percent), US 67 (16 percent) and Route 141 (7 percent)
- 2009 – Increase in crashes for Route 141 (16 percent) only
- 2009 – Decrease in crashes for US 40 (11 percent), US 61 (5 percent), US 67 (4 percent) and Route D (32 percent)

Major Arterials:

- 2008 - Increase in crashes for Route 100 (5 percent) only
- 2008 - Decrease in crashes for Routes 30 (20 percent), 115 (6 percent), 180 (13 percent), 340 (3 percent) and 366 (15 percent)
- 2009 – Increase in crashes for Routes 100 (10 percent) and 115 (0.1 percent)
- 2009 – Decrease in crashes for Routes 30 (13 percent), 180 (19 percent), 340 (15 percent) and 366 (5 percent)

Figure S-1 – All Crashes for Freeway Roadways

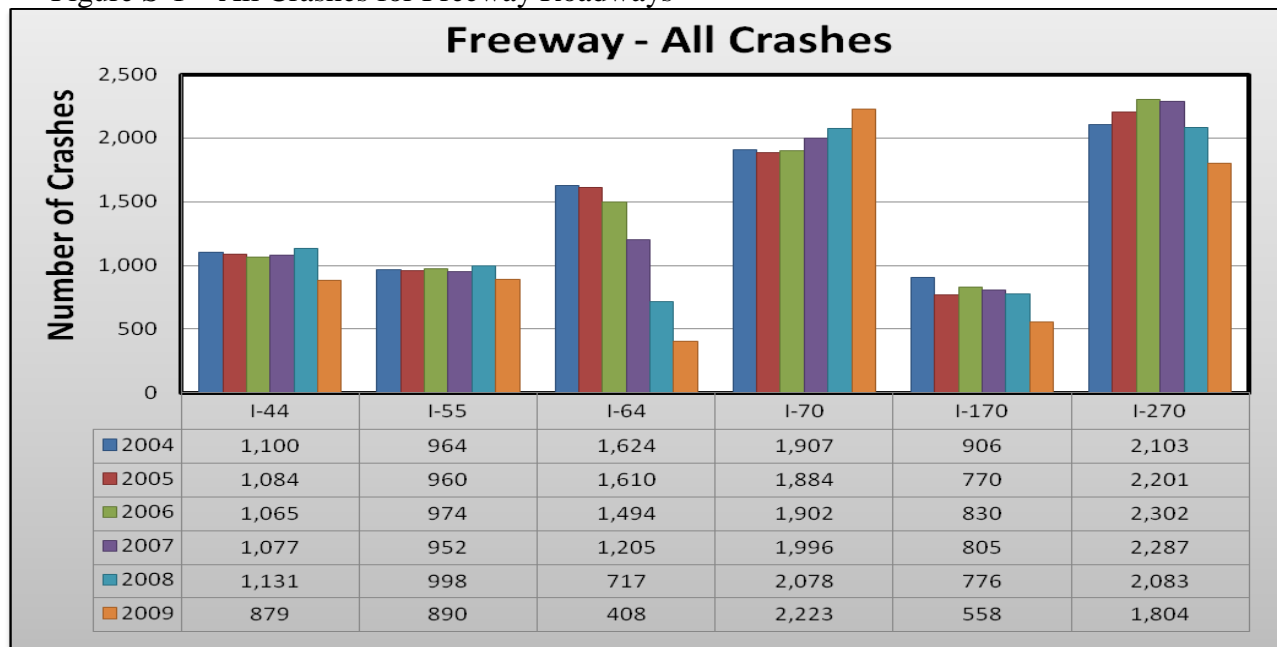


Figure 2 – All Crashes for Expressway Roadways

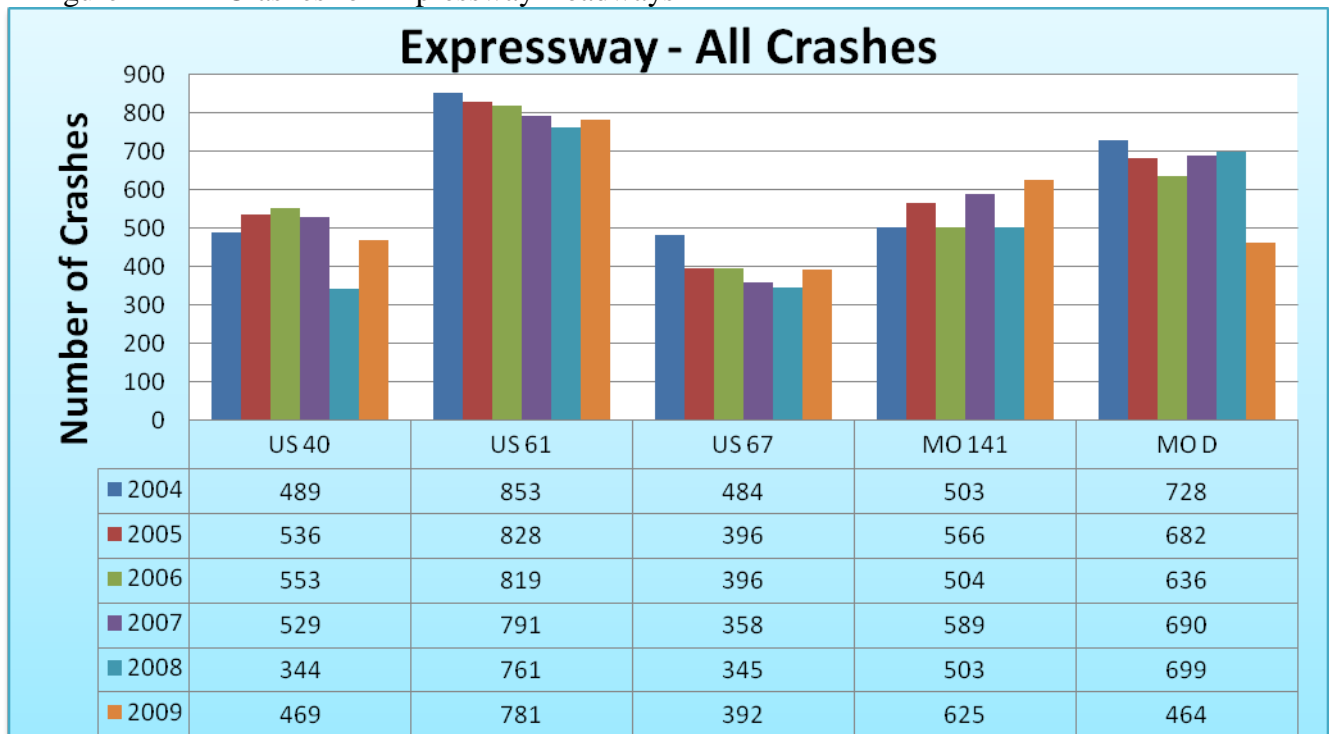
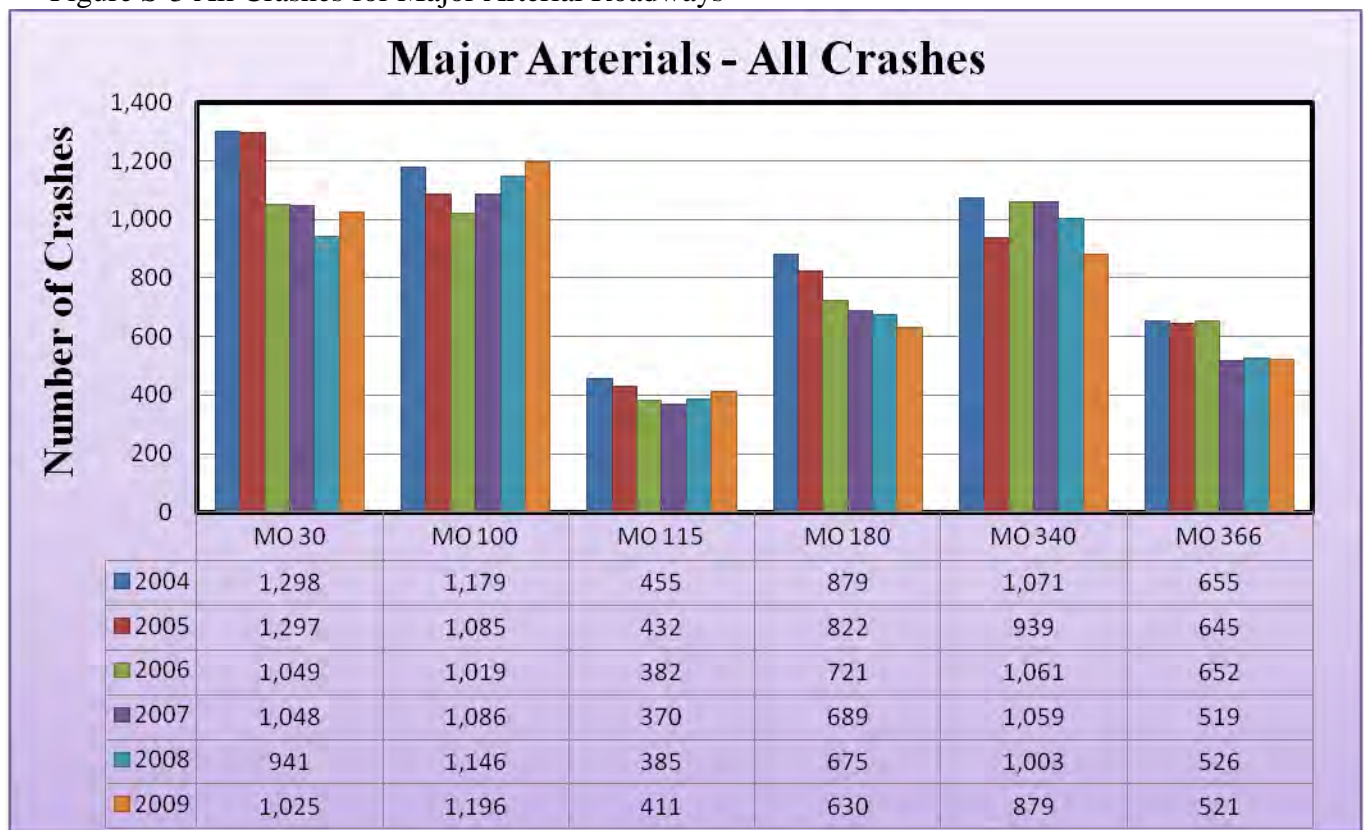


Figure S-3 All Crashes for Major Arterial Roadways



Crash Rates Analysis:

The crash rate represents the exposure to crashes relative to total vehicle miles traveled. For example, if roadway A shows a higher crash rate than roadway B, it indicates that roadway A was more vulnerable to crashes than roadway B. Traffic volumes, roadway lengths and number of days are used in calculating crash rates, thus equalizing the comparison between roadways. Figures S-4 through S-6 present the crash rates for roadways investigated, the major findings from the crash rate analysis are as follows:

Roadway Safety – Results

Comparisons were based on average crash rates for the 4-year pre-closure period compared to the 2 year closure period

Freeways:

- 2008 - Increase in crash rates for I-70 (9 percent) and I-55 (0.1 percent)
- 2008 - Decrease in crash rates for I-44 (0.7 percent), I-64 (51 percent), I-170 (7 percent) and I-270 (7percent)
- 2009 – Increase in crash rates for I-70 (12 percent) only
- 2009 – Decrease in crash rates for I-44 (25 percent), I-55 (5 percent), I-64 (72 percent), I-170 (31 percent) and I-270 (21 percent)

Expressways:

- 2008 - Increase in crashes for Route D (2 percent) only
- 2008 - Decrease in crashes for US 40 (35 percent), US 61 (8 percent), US 67 (16 percent) and Route 141 (7 percent)
- 2009 – Increase in crashes for Route 141 (16 percent) only
- 2009 – Decrease in crashes for US 40 (11 percent), US 61 (5 percent), US 67 (4 percent) and Route D (32 percent)

Major Arterials:

- 2008 - Increase in crashes for Route 100 (5 percent) only
- 2008 - Decrease in crashes for Routes 30 (20 percent), 115 (6percent), 180 (13 percent), 340 (3 percent) and 366 (15 percent)
- 2009 – Increase in crashes for Routes 100 (10 percent) and 115 (0.1 percent)
- 2009 – Decrease in crashes for Routes 30 (13 percent), 180 (19 percent), 340 (15 percent) and 366 (5 percent)

Figure S-4 - All Crash Rates for Freeway Roadways

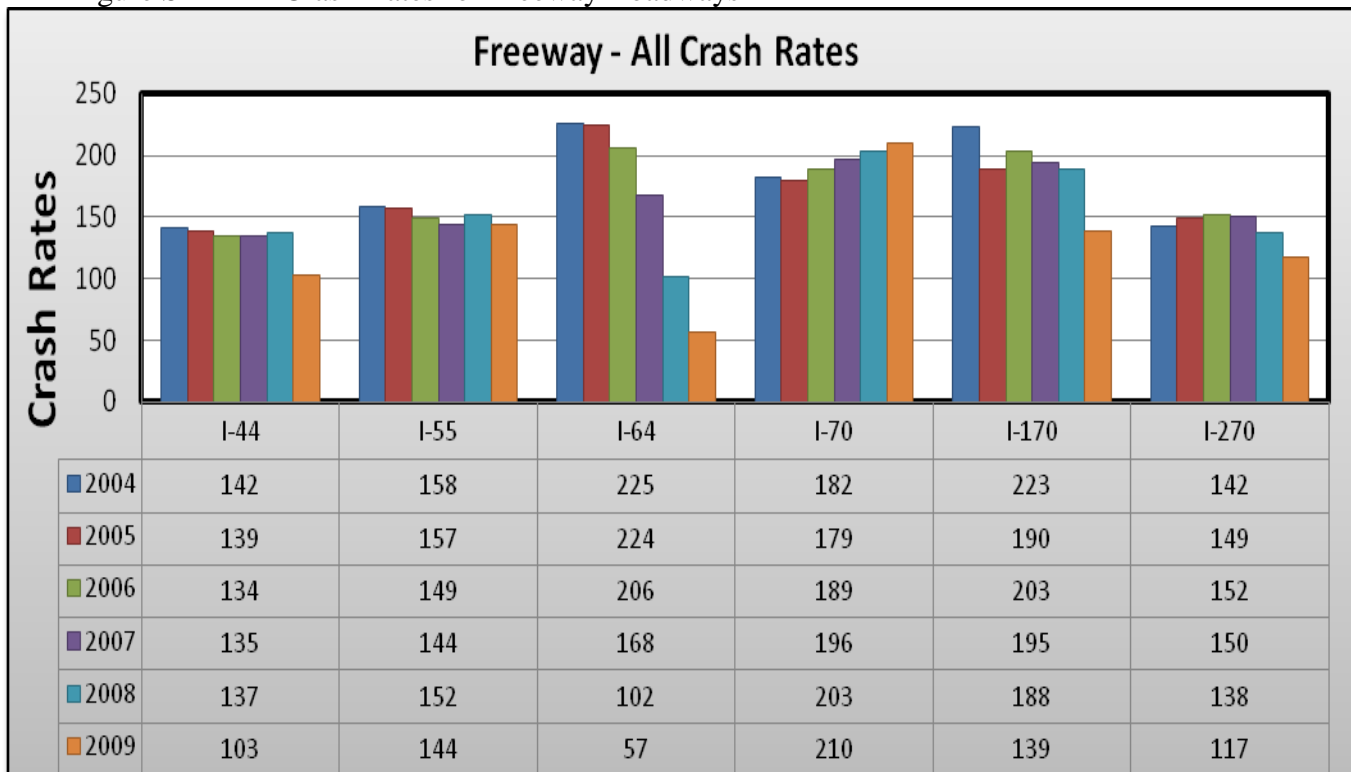


Figure S-5 – All Crash Rates for Expressway Roadways

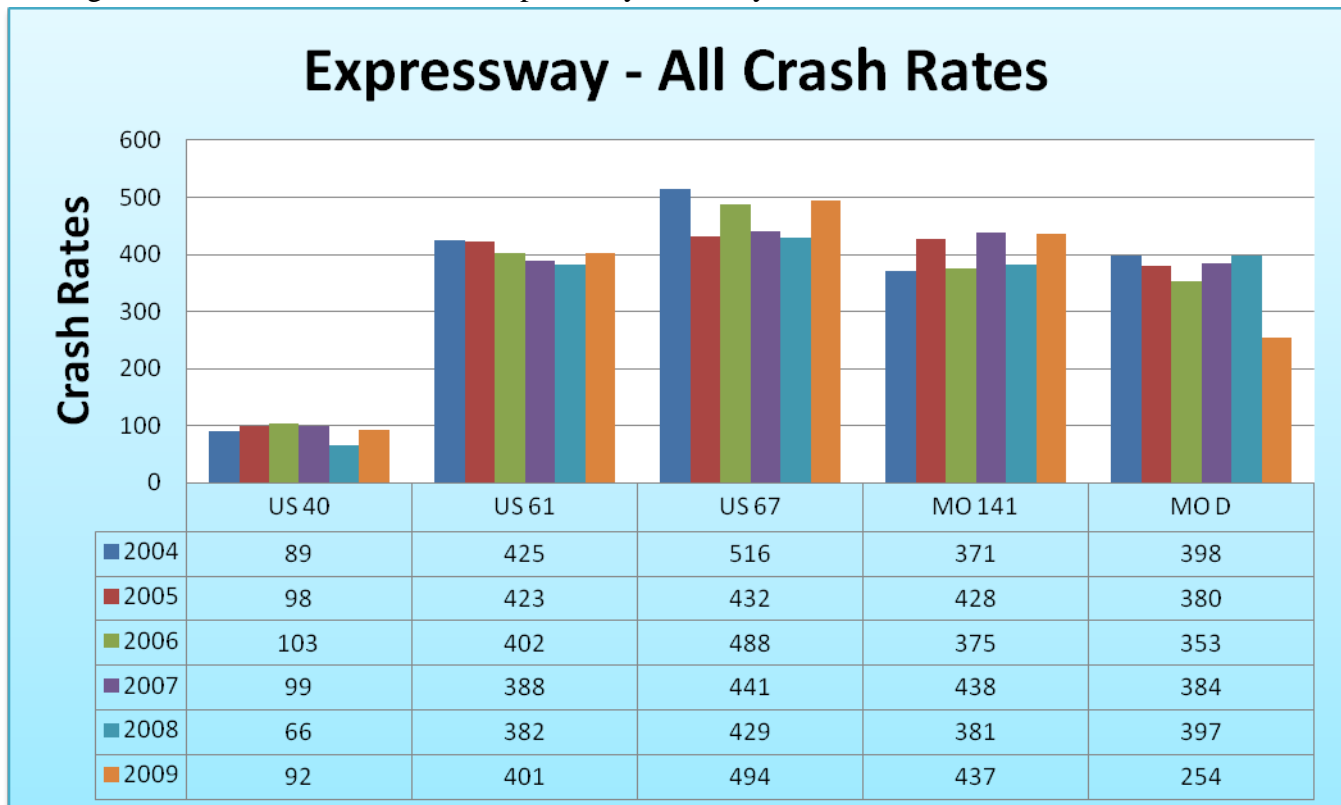
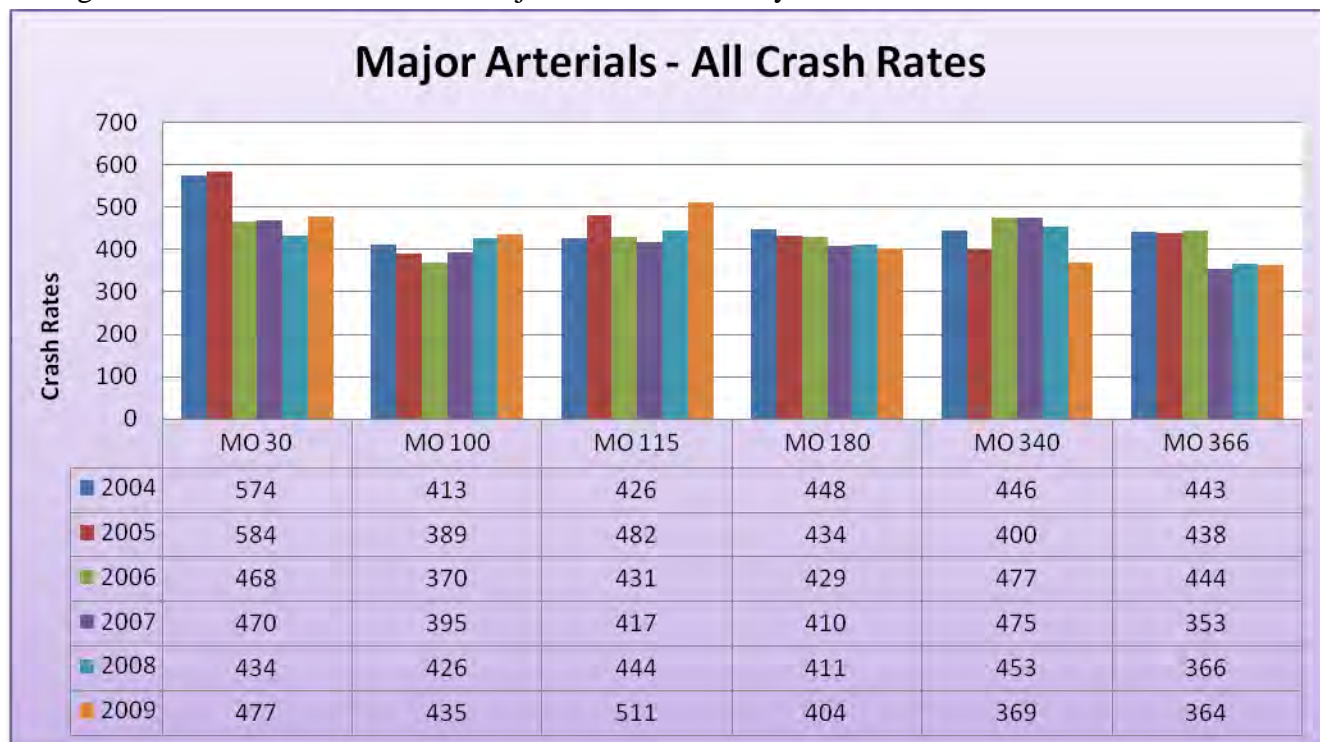


Figure S-6 – All Crash Rates for Major Arterial Roadways



Regional Economics – Discussion

This Annual Report provides detail related to the economic analysis conducted by HDR Decision Economics to ascertain the impacts on the local and regional economies due to the New I-64 project and the associated road closures. The analysis tracks and focuses on the impacts before, during, and after the systematic closures of I-64 to determine how they affect the local economy, businesses, and traffic patterns. The overall objective of this analysis is to determine whether the closures disrupted local businesses due to increased congestion and possible barriers to accessing labor, customers, or shipments. Various methods are used to quantify and determine the magnitude of local and regional impacts.

For the analysis, data was collected quarterly from the initial construction closure in January 2008 through the reopening in December 2009 of the New I-64 project. It was used to assess the economic impacts to local businesses, the real estate market, commuters, and revenues due to the closure. In addition to the published data, three business surveys were developed and distributed in February 2008, November 2008, and January 2010 to track the effects of I-64's closure on: (1) commuting; (2) transportation costs; and (3) sales, visitation, and economic activity.

The analysis covers the overall region which consists of St. Louis County and City of St. Louis. Since the impacted portions of I-64 overlap city/county borders, the impacted nine ZIP codes containing the closed sections of I-64 were aggregated into the corridor area, and the remaining ZIP codes of the City of St. Louis and St. Louis County compose the non-corridor area.

Published Economic Data

Published economic data were used to track economic indicators over the course of the I-64 reconstruction project. An economic baseline of current conditions was first developed based on the data sources used for the earlier 2006 Pre-Construction Analysis by Missouri Economic Research and Information Center (MERIC).² Federal, Missouri, St. Louis County, City of St. Louis, and private-sector data supplemented the 2006 data to establish the baseline.

The core economic and demographic concepts utilized in the baseline included employment, labor force, population, commercial and retail real estate trends, taxable sales, and other related metrics. The decision to use these specific economic indicators was based on the frequency of data publication, time lag, availability, and level of detail. This same data was collected for the time period during the I-64 construction project, as well as the period after the project was completed.

The industrial and geographic detail was considered crucial because businesses will respond differently to changes in the road network based on their proximity to I-64 and the industry's reliance on transportation. To gauge the impacts from I-64 reconstruction, comparisons focused on: a) time series trends (before, during, after); b) sub-county economic trends; and c) county and national-level macroeconomic conditions.

Business Surveys and Interviews

As part of the analysis, HDR developed three business surveys. The business surveys were conducted to specifically target the business climate and economic conditions of firms with various transportation needs throughout the region. With the help of local business associations, the surveys were distributed to businesses within St. Louis City and County. The three surveys were distributed on the following dates: February 2008, November 2008, and January 2010.

The surveys' questions were directed at conditions just prior to the initial closure of I-64, the changes during the western and eastern closures, and conditions following the reopening of I-64. The surveys focused on three main impact areas: 1) transportation costs, 2) sales and visitation, and 3) commuting Impacts.

As a supplement to the business survey, HDR conducted follow-up, in-depth interviews with transportation-dependent businesses in and near the I-64 corridor. During the interview process, 12 separate businesses from varying industries were contacted via telephone. Representatives were interviewed from various industries to gauge how different industries are being impacted, which are more susceptible to the New I-64 project, and the steps businesses are taking to cope with the closure. The interviews focused on determining:

- How businesses prepared for the closure;
- The impact on commuters;
- Changes in transportation costs; and
- Whether outreach with employees, clients, and patients was successful.

² MERIC, "Interstate 64 Business Climate Report Pre-Construction Analysis" St. Louis, MO: MERIC, April 2006

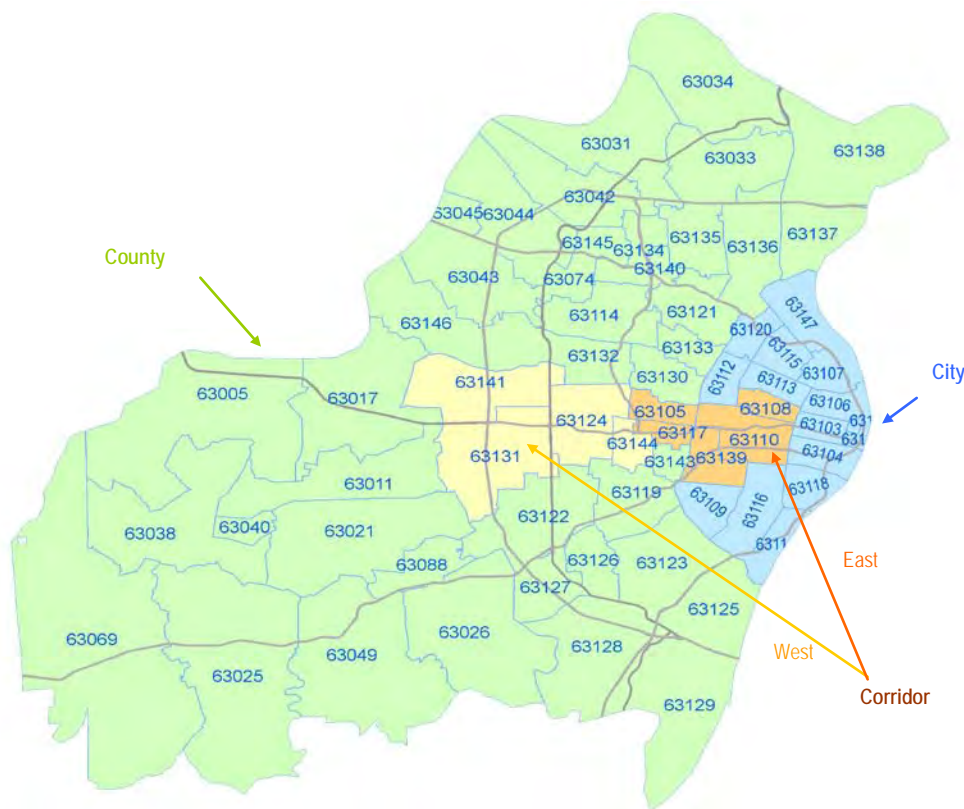
Economic Data Indicators

The economic data collected and reported through this study used many of the same data sources as the “Pre-Construction Analysis”³ report to remain consistent and enable tracking long-term economic trends.

Given the nature of the project and the level of detail required for the analysis, the research team employed a “bottom up” approach using detailed ZIP-code-level data for the I-64 corridor. The map below illustrates the ZIP code definitions for each region, including those comprising the I-64 corridor. The published economic data collected at the ZIP code level includes jobs, wages, number of establishments, and taxable sales by industry type. Real estate, household, and other demographic information were collected in addition to the industry-based data to capture the total impacts to the region.

Throughout this report, the terms “corridor” and “non-corridor” will be used to describe aggregations of the data. “Corridor” refers to the regions labeled “East” and “West” below in Figure E-1, while “non-corridor” refers to the balance of the map below, labeled “County” and “City.” The combined St. Louis County and St. Louis City represent the St. Louis metropolitan area.

Figure E-1 Zip Code Definitions for Study Regions



Data Concepts and Sources

Employment, Wages, and Establishment Statistics

The “Quarterly Census of Employment and Wages” (QCEW) dataset is compiled by Missouri Economic Research and Information Center (MERIC) and includes employment, wages, and the number of establishments by industry. It is publicly available at the county level. In an effort to track sub-county corridor-level conditions, the research team reached an agreement with MERIC to create custom tabulations of the QCEW at the zip-code level for the two-digit North American Industrial Classification System (NAICS). The standard QCEW has few data suppressions at both the city and county geographies, making the data ideal for this analysis.⁴ Although the economic data is published on a quarterly basis, there is a lag of at least three months from collection and processing to its official release. The most recent release for both St. Louis County and St. Louis City is the fourth quarter of 2009.

Unemployment Rate, Labor Force

MERIC’s Local Area Unemployment Statistics (LAUS) covers labor force and subsequent unemployment rates for each county, city, and MSA within the state. These estimates are derived from historical data, the Current Employment Statistics (CES) program, and the Unemployment Insurance (UI) system. The county and city data are reported monthly for all geographical areas but are not available until three months after being collected. ZIP-code level data is reported quarterly and available two to three months after collection. The last reported month was April 2010. The LAUS is reported by MERIC to the U.S. Bureau of Labor Statistics (BLS) for their unemployment estimates.

Population

The U.S. Census Bureau publishes demographic data for the nation, state, cities, and towns. Census population data and estimates are the most commonly cited and available demographic data for the U.S. Estimates for the total population are available for both the City of St. Louis and St. Louis County through 2009. Every ten years the U.S. Census Bureau collects new demographic data for the US. Between censuses, these data are updated every year on July 1. Population estimates for 2010 are unavailable as the decennial census is in progress.

Taxable Sales

Missouri Department of Revenue (MoDOR) reports Quarterly Taxable Sales by ZIP code, and this data is currently available up to and including the second quarter of 2010. Taxable sales are used to track consumer and retail spending and overall economic activity at a detailed geographic level. The Taxable Sales by City dataset also separates taxable sales for each individual industry via the Standard Industrial Codes (SIC) at the two-digit level. Since 1997, federal agencies adopted the North American Industrial Classification System (NAICS) for reporting business related economic data. This presented a minor challenge for the analysis since MoDOR’s data is still tabulated using the older SIC classifications. The taxable sales data by ZIP code provides sufficient geographic detail to allow an examination of the direct sales impacts on the I-64 Corridor.

⁴ QCEW data does not disclose county level data if there is fewer than three establishments in a given industry or if one firm constitutes more than 80 percent of area employment.

Real Estate

The “I-64 Business Climate Report: Pre-Construction Analysis” used a custom tabulation provided by the Torto Wheaton Research Group (TWR), now CB Richard Ellis (CBRE). The data included annual and quarterly estimates for industrial building gross rental asking price, availability, net absorption, and stock for the City of St. Louis, St. Louis County, and the I-64 Corridor. In addition to the CBRE data, supplemental data was obtained for the real estate analysis. On the residential side, the National Association of Homebuilders (NAHB) reports the volume of building permits for single and multi-family units both at the regional and national level. This information was also utilized in the analysis.

Economic Data Trend Analysis

Purpose

Large transportation projects often disrupt traffic patterns through lane closures, delays, and detours. These disruptions can impact businesses, commuters, and freight transport through traffic diversions or significant delays. Customers or clients can be inconvenienced enough that they avoid certain impacted areas, which can affect business districts. The Interstate 64 reconstruction project completely closed two separate sections of I-64 over a two-year project period. Because the closure could cause significant delays and diversions, businesses were concerned that they would be dramatically impacted.

The western closure of I-64 (west of I-170) occurred in January 2008, and this portion of the road remained closed until December 2008. The eastern closure of I-64 took place from December 2008 through December 2009, following the reopening of the western closure. As part of this study, an analysis was performed to determine if the economic conditions experienced in the corridor area during the western and eastern closures of I-64 were a direct result of the reconstruction and congestion, or the global recession. The economic concepts were collected and tracked from the “Pre-Construction” analysis through project completion.

Looming in this analysis of economic trends is the economic recession, which officially began in December 2007 according to the National Bureau of Economic Research. The impact of the recession became evident in the job market in the middle of 2008, as employment dropped below 2007 levels and continued to decline through 2009. Consumer activity showed similar trends as total taxable sales declined in 2008 by 3.3 percent and another 7.4 percent in 2009. The following sections will provide detailed information on the economic conditions before, during, and after I-64’s reconstruction.

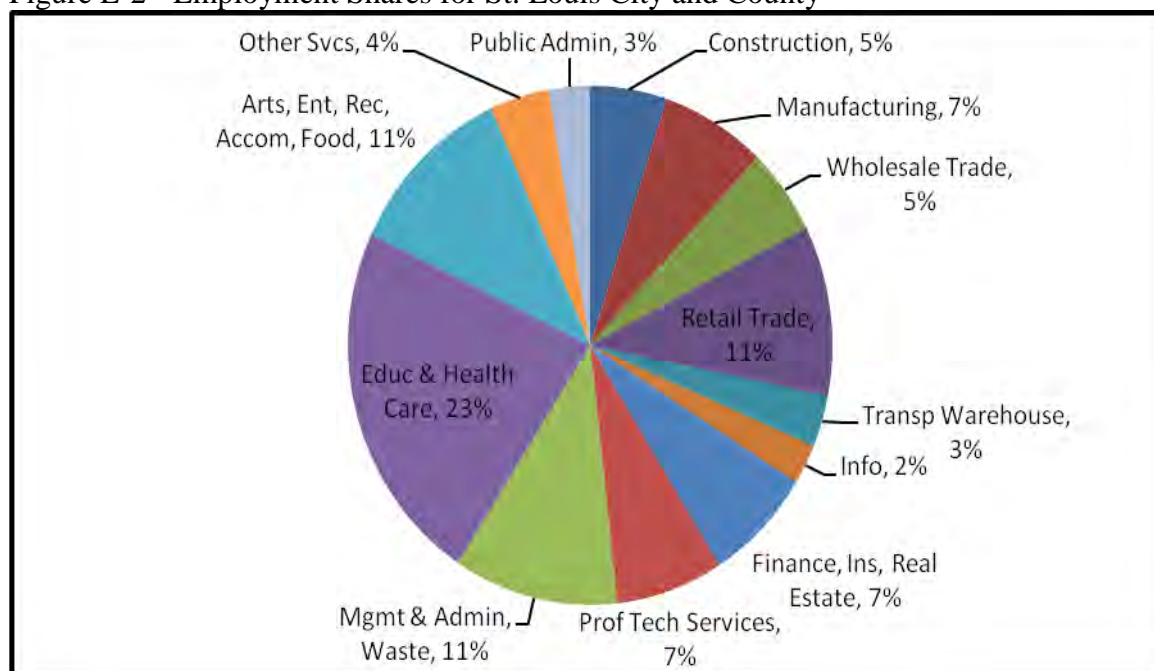
Employment

The four largest industry sectors in terms of employees within the St. Louis metropolitan area are: education and health care; management and administration; arts, accommodation and recreation; and retail. Combined, these sectors account for 45 percent of total employment. Figure E-2 shows the breakdown of employment by industry for St. Louis City and St. Louis County.

Compared to the national average, the city/county area has a high concentration in finance and real estate, which demonstrated stable growth throughout 2007 until fourth quarter 2008, where

finance and real estate employment declined by two percent. By the fourth quarter of 2009, finance employment leveled off with 51,820 jobs for the region. In addition, the high percentage of health care facilities within the nine ZIP code corridor is unique as its services are generally critical for residents and have limited or no substitutes. The high concentration of hospitals and health care establishments in the corridor⁵, and the unique nature of the health care services have maintained stable employment levels in health care, with a total of 164,760 jobs for the last quarter of 2009.

Figure E-2 - Employment Shares for St. Louis City and County



Source: MERIC QCEW

As of fourth quarter 2009, the total employment for the study area was 773,184 of which 28 percent is concentrated in the corridor region and represents a 7.7 percent decline in total employment since the start of the recession in December of 2007. Traditionally, employment for the region follows a seasonal trend where employment increases from the first quarter to the second quarter of the year, followed by a small contraction in the third quarter, and a rebound in the fourth quarter coinciding with the holiday season. This trend was not maintained in 2009, when employment levels declined in every quarter except the fourth, consistent with national trends.

Industry employment trends for the county and city are summarized below.

- Management and administration jobs have continued to decline since its peak in third quarter 2008 (90,018 jobs). For the fourth quarter of 2009, there were 77,243 management and administration jobs.

⁵ Business Surveys and Interviews confirmed that hospital patients and activities were unaffected by I-64

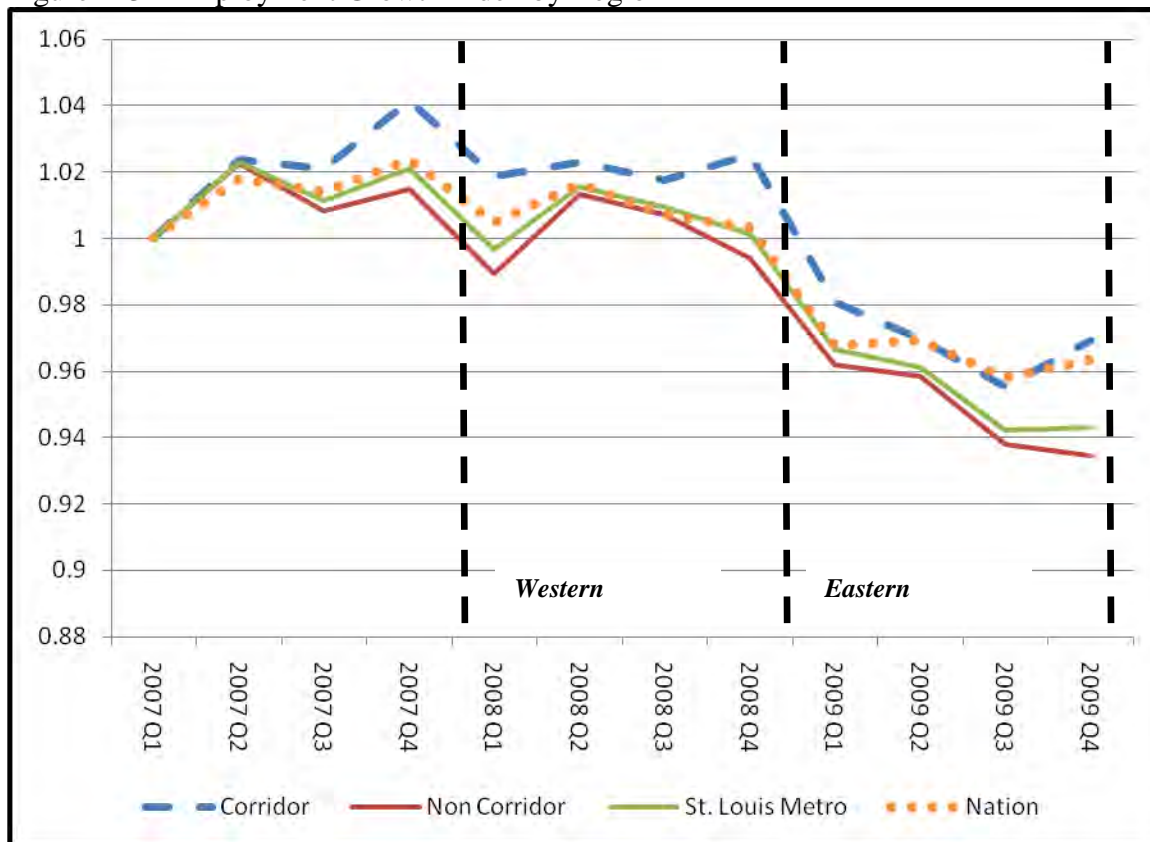
- Retail employment peaked in fourth quarter 2007 with 83,750 jobs, and has since declined with the exception of the fourth quarter of 2008, coinciding with the holiday shopping season. Despite the slight positive growth at the end of 2009, most retail growth during that year has been flat. Wholesale trade employment has declined throughout 2009, at an average rate of -1.6 percent.
- The decline in manufacturing jobs has continued through 2009, with 44,720 jobs at year end as compared to 52,770 jobs in 2008. From the beginning of 2009 through the end of the year, 5,324 manufacturing jobs have been lost. This represents a 10 percent decrease in manufacturing employment. As a percent of total employment, manufacturing in the corridor region dropped from four to three percent, and 9.3 percent to 7.6 percent for the non-corridor between 2007 and 2010.
- The construction industry has experienced a decline in jobs, coinciding with national trends. Comparisons between the fourth quarter of 2008 and 2009 show a decline of 15 percent, a loss of 6,167 jobs. Like manufacturing, the industry mix declined between 2007 and 2010, the corridor region dropping from 4.4 to 3.8 percent and the non-corridor region from 6.4 to 5.6 percent.

To determine whether employment deviated from the pre-project trend, an employment growth index was constructed based on 2007 data. Figure E-3 below shows this growth index for each region. The index shows that the corridor's employment growth remains above all other comparison regions with the exception of the US in the second and third quarters of 2009, representing the point in time when eastern portion of I-64 was closed for reconstruction. Employment dropped 5.4 percent in 2009 for the corridor following stable job growth in 2007 and 2008.

Prior to the economic recession, the employment trends for the corridor and non-corridor region indicate that employment was growing from its 2007 levels. Following the start of the recession, job growth began to fluctuate for all regions, and in the second quarter of 2008 employment declined for the non-corridor area, state and nation. The corridor region's employment growth remained relatively unchanged through 2008; however, this area represents only 28 percent of the total employment for the region. As a result, the effects of the non-corridor's employment decline displace the marginal gains in the corridor region at the end of 2009. In general, however, all regions experienced similar trends in employment during the project period.

The flat employment trend in the corridor, during the start of the recessionary period and the start of the I-64 western closure, suggests that the construction and closure of I-64 did not significantly impact the corridor region. This major regional change to the transportation network that occurred with the western closure did not seemingly affect employment, implying that the employment trends were more influenced by the recession. The industry mix in the corridor was likely responsible for maintaining greater employment growth throughout and after the I-64 reconstruction. The corridor's higher concentration of finance and insurance (two percentage points greater than the non-corridor) and health care employment (13 percentage points greater than the non-corridor) provided stable employment base during the project period and economic recession.

Figure E-3 - Employment Growth Index by Region

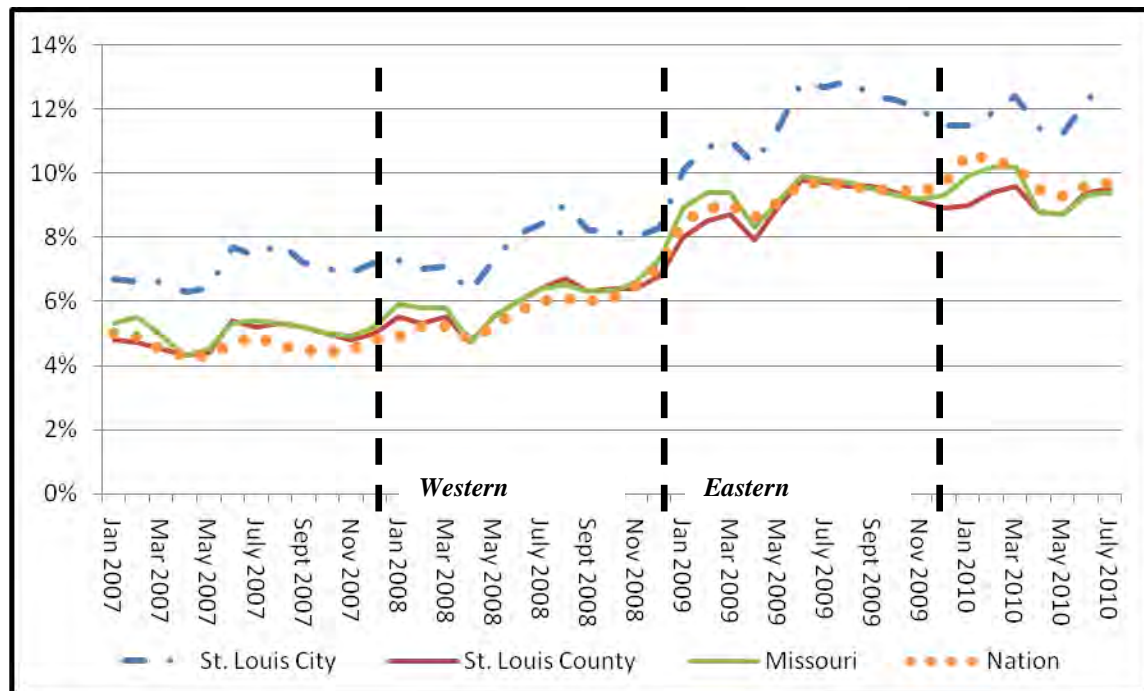


Source: MERIC QCEW

Unemployment

The economic recession, officially starting in December of 2007, began showing signs in St. Louis' labor market in mid-2008, likely just before the decline in the housing market. By June 2008, the unemployment rate for St. Louis City reached 8.1 percent; St. Louis County wouldn't reach the eight percent mark until January 2009. By the end of 2009, the unemployment rate for the city reached 11.5 percent, and 8.9 percent for the county. Figure E-4 shows the monthly unemployment trends for the St. Louis City, St. Louis County, Missouri, and the Nation for January 2007 through July of 2010. As the figure shows, St. Louis City's unemployment rate has been higher than St. Louis County, State of Missouri, and nation from 2007 through July 2010. Unemployment rate trends remained flat during the start of the western closure, following national trends through the eastern closure and reopening of I-64.

Figure E-4 - Unemployment Rates for St. Louis City, St. Louis County, Missouri and Nation



Source: MERIC LAUS

Wages

Similar to employment, the MERIC QCEW wage data is provided at the ZIP code and industry level. At the geographic level, the nine ZIP code corridor region generates 27.6 percent of the total wages and 24.7 percent of total jobs of the entire city/county region with a total of \$2.7 billion in the fourth quarter of 2009 (Figure E-5). Therefore the corridor wages per employee, on average, are greater than the non-corridor. However, the much larger non-corridor region still generated \$7.1 billion in wages in the fourth quarter 2009, which represents 72 percent of the regional wages.

National economic pressures have placed more downward pressure on wages across both the corridor and non-corridor regions in 2008. This pressure intensified in 2009. The substantial increase in fourth quarter 2008 wages is attributable to additional compensation (year-end bonuses, profit-sharing and firm buyout payments) that represents a unique one-time payment and account for the large wage variation from the previous quarter. Net of these additional compensation payments, the non-corridor would have still demonstrated positive growth from third quarter 2008, albeit at a much smaller rate. As Figure E-5 shows, aggregate wages for 2009 declined for both regions, but the corridor's share of total wages increased over 2009, suggesting that wage growth was greater in the corridor during the eastern closure relative to the non-corridor.

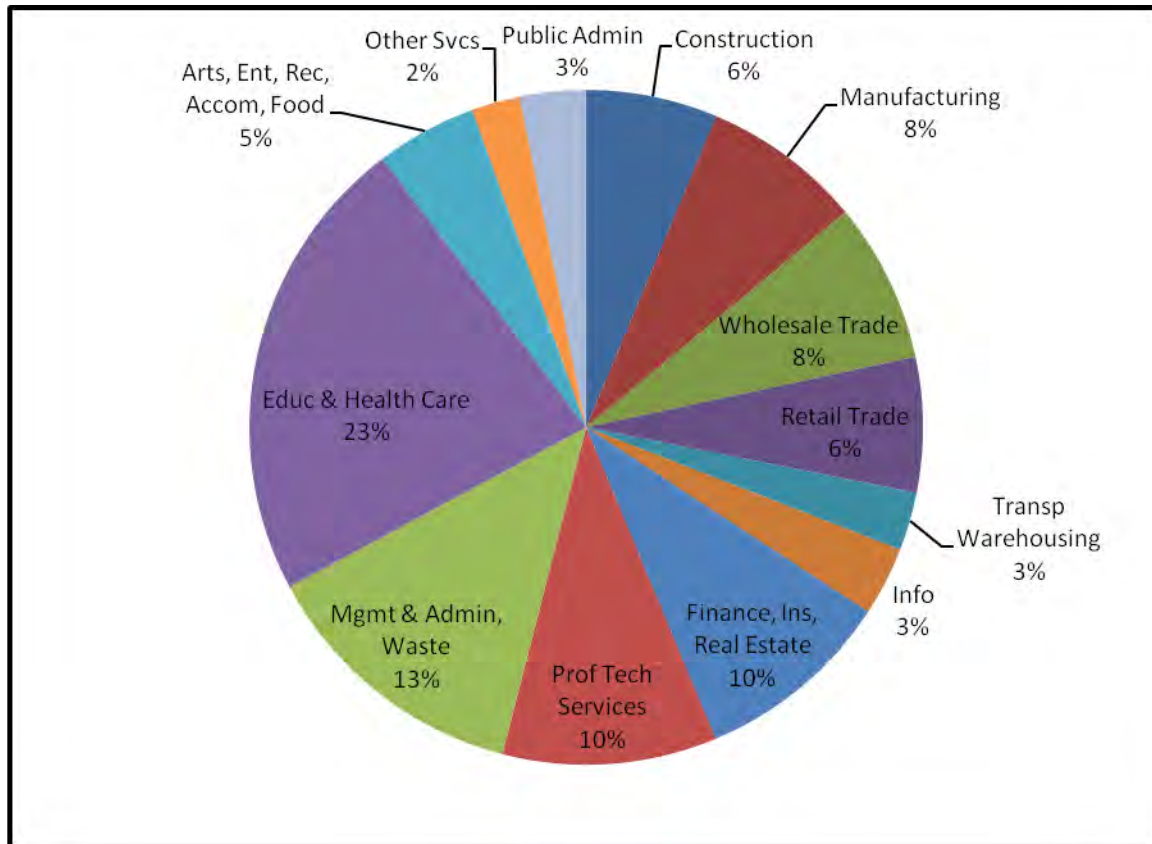
Figure E-5 - Total Quarterly Wages by Region (in millions of dollars)



Source: MERIC QCEW

Service-based industries account for more than half of the wages distributed. Health care and education are the largest contributors to wages in the region, providing over 23 percent, as shown in Figure E-6. Wholesale trade contributes eight percent of the wages to the region, but has a smaller share of employment (five percent) indicating higher pay. Whereas retail trade contributes six percent of wages to the region, but represents 11 percent of total employment, indicating lower paying jobs. The same is true of the arts, recreation, entertainment, and food service industries, where the share of wages is five percentage points lower than the share of employment for that industry category.

Figure E-6 - Share of Wages by Industry (entire metropolitan region)



Source: MERIC QCEW

Taxable Sales

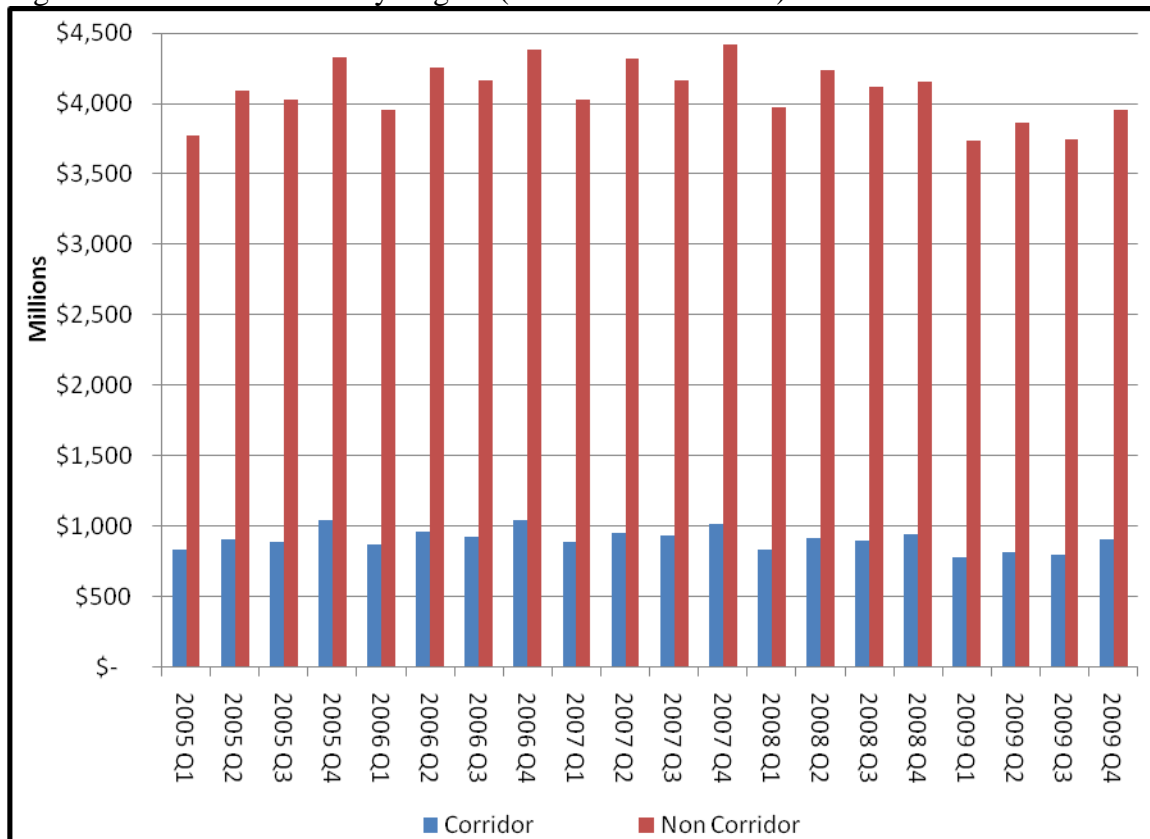
Taxable sales are a dynamic measurement of business and consumer expenditures and economic performance, as taxable sales measure the amount of spending within the region. As economic conditions change, spending patterns are the first to respond as consumers and businesses will be more likely to hold onto cash and reduce unnecessary spending. Shifts in employment typically respond on more of a lagged basis, and these effects can be seen on the national scale as consumer spending has declined and savings has increased. The graph (Figure 6) below shows the total taxable sales for each quarter, from first quarter 2005 to fourth quarter 2009, in millions of dollars. As Figure E-7 indicates, the taxable sales for the non-corridor are almost four and a half times larger than the taxable sales for the corridor area.

The combined taxable sales for the city and county were \$4.52 billion for the third quarter of 2009. Analysis of fourth quarter 2009 shows total taxable sales increased by 7.6 percent to a combined total of \$4.86 billion. When compared on a year-by-year basis, the fourth quarter 2009 taxable sales revenues dropped \$231 million dollars from the fourth quarter of 2008, which represents a decline in fourth quarter sales of 4.5 percent.

While fourth quarter 2009 taxable sales increased by 7.6 percent from the third quarter, as expected due to holiday sales, the increase in those sales was still below 2008 and 2007 levels.

Figure 6 shows the total taxable sales for each quarter, from first quarter 2005 to fourth quarter 2009, in millions of dollars. The Figure 6 shows that taxable sales for 2009 have dropped below 2005 levels, with the year end taxable sales totals for 2009 coming in \$1.2 billion less than 2005.

Figure E-7 - Taxable Sales by Region (in millions of dollars)

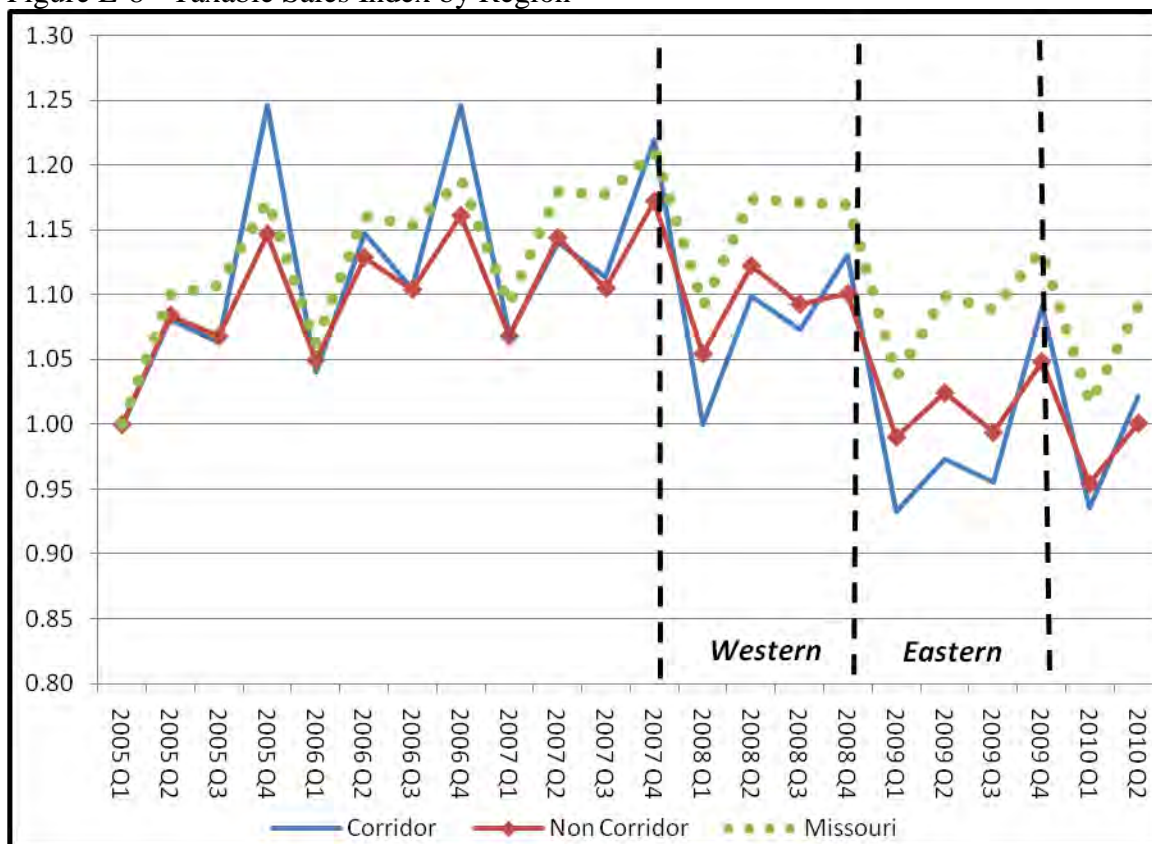


Source: Missouri Department of Revenue

The seasonal taxable sales patterns are best reflected in the taxable sales growth index presented in Figure E-8. The index demonstrates quarterly taxable sales growth by region in the study area, county, city, non-corridor and corridor. Each year, sales follow a quarterly cycle similar to employment (a strong 4th quarter recovery). As the Figure E-8 shows, the corridor area's taxable sales, while demonstrating similar trends as the other regions, has the most fluctuation. The total taxable sales in the corridor are the smallest by comparison, but the corridor exhibits the largest fourth quarter growth as seen in Figure 7.

The region's growth followed the expected seasonal pattern, maintaining an overall level of positive growth until 2007, where the 2007 fourth quarter growth fell short of the previous years and was followed by a significant drop in taxable sales in first quarter 2008. Sales did recover during the course of 2008, but they remained below 2006 levels with one exception.

Figure E-8 - Taxable Sales Index by Region



Source: Missouri Department of Revenue

Although overall sales declined in 2008 and continued into 2009, individual industries were impacted differently. For example, the taxable sales for food stores remained steady from 2005 through 2009 for all regions. Taxable sales for hotels dropped significantly in 2009 within St. Louis County, while St. Louis City's hotel taxable sales were almost double of those in 2005. Real estate sales in St. Louis began contracting in 2006 for both the city and county, consistent with national real estate and housing trends.

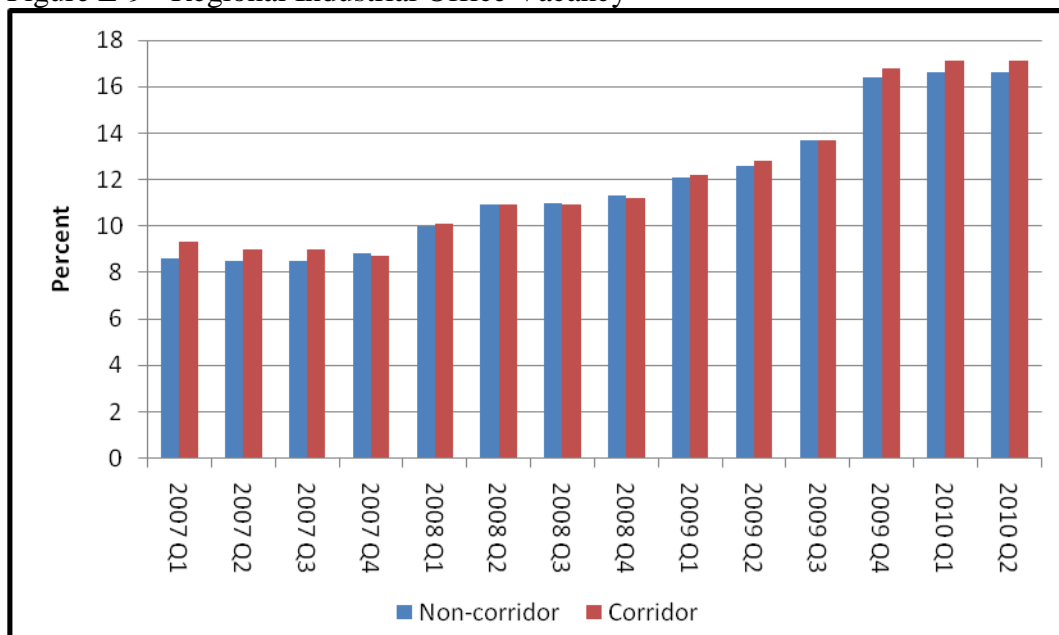
Since then, real estate sales in St. Louis City have remained at roughly half of their peak values in 2005, while St. Louis County has returned to positive growth in the second half of 2008 to then drop below 2005 levels throughout 2009. St. Louis City taxable sales decreased by 4.1 percent in the first half of 2010, while St. Louis County taxable sales decreased by one percent.

As FigureE-8 shows, the smaller corridor region's taxable sales decreased immediately after the western portion of I-64 closed and the onset of the economic recession. The corridor region exhibited signs of recovery in the second and fourth quarters of 2008. However, the decline in taxable sales for the corridor following the reopening of I-64 suggests that sales were not significantly influenced by the closure of I-64.

Real Estate

Despite the start of the recession in December 2007, office vacancy rates in the St. Louis metropolitan area remained steady for three quarters before increasing in late 2008, see Figure E-9. It was not until the fourth quarter of 2008 that vacancy rates began to tick upward (an increase in vacancy rates is a negative impact), and they continued to increase slightly through the third quarter of 2009. This trend indicates that the recession's impact on the office market was lagged due to a shift in the demand for office space.

Figure E-9 - Regional Industrial Office Vacancy



Source: CBRE

Office vacancy rates for the fourth quarter of 2009 increased to 16 plus percent and remained at the same level through the first half of 2010. These trends follow the regional unemployment patterns closely, as the region's unemployment rate declined in the last quarter of 2009 and increased in the first half of 2010. As of May 2010, St. Louis ranks 34th in terms of its office vacancy rate compared to the major metropolitan areas in the United States.⁶ The St. Louis rate is 0.8 percentage points greater than the national average.

CBRE⁷ created a custom real estate database for the corridor and non-corridor regions, as well as the St. Louis metropolitan area. The data, compiled at the ZIP code level, provides vacancy rates, net and gross asking rent prices, the number of buildings, total stock, completions⁸, net absorption, and availability rates for industrial and office real estate. The analysis conducted for this annual report focuses on gross asking rates, as 95 percent of the vacant office space in the St. Louis metropolitan area is quoted in gross terms. Industrial space for St. Louis is quoted in both in gross (40 percent) and net terms (60 percent); the analysis will focus on the net industrial asking rates.

⁶ Red Capital Group, "Market Overview St. Louis, Missouri"

⁷ CB Richard Ellis

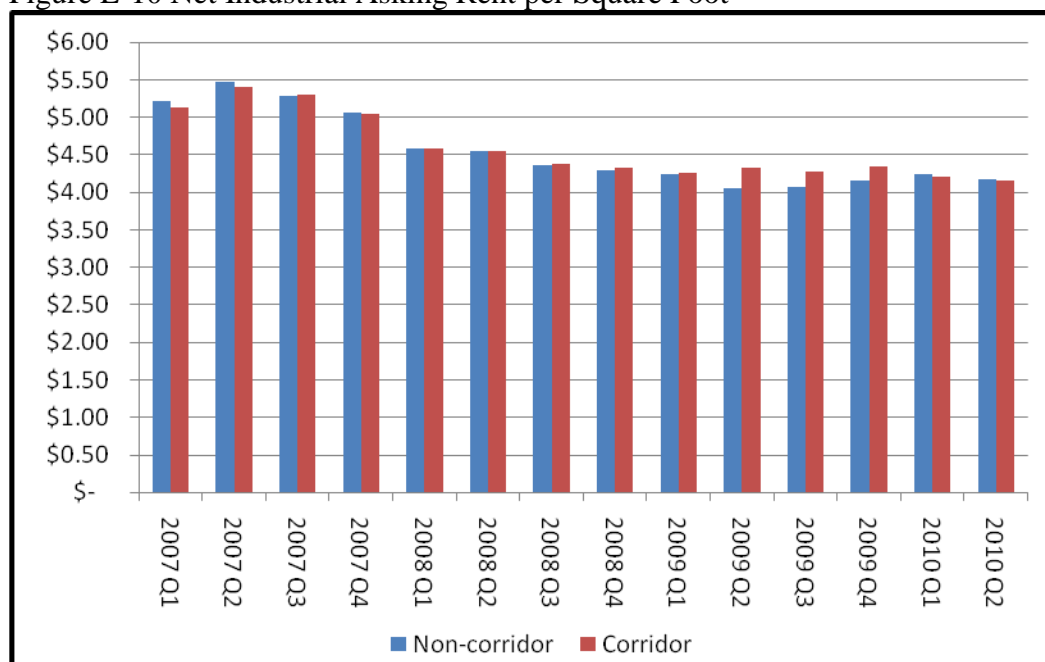
⁸ Concluding conveyance of property sales

The CBRE industrial data showed net asking rent prices per square foot have declined from peak prices in the second quarter of 2007. Since then, industrial rates have declined from almost \$5.50 per square foot to less than \$4.20 for both the corridor and non-corridor regions. Figure E-10 below shows the regional industrial vacancy rates, which have increased for the corridor by 84 percent and 93 percent for the non-corridor since the first quarter of 2007.

During this period, industrial space expanded by 1.5 percent for the corridor and 1.4 percent for the non-corridor area. The rise in industrial vacancy and slow growth in industrial space for the region indicates that the industrial market has been hit hard by the economic recession rather than the closures in I-64. Furthermore the highest industrial vacancy rates occurred in the first half of 2010, after the reopening of I-64. In terms of overall stock, the non-corridor region has the larger stock of industrial space. Therefore shifts in the most concentrated industrial market occurred following the reopening of I-64 and were not located along the impacted corridor region.

The increase in the industrial vacancy rates over the last three years corresponds to the decline in net asking industrial rent for both regions. Since the peak in second quarter 2007, asking lease rates for both regions have dropped 24 percent. The decline in asking rents is likely due to decreased industrial demand, high vacancy, and elevated levels of unemployment within the region. The average difference in industrial asking rent between the corridor and non-corridor areas has been around one percent for the last three years, and this spread has been maintained throughout the I-64 project.

Figure E-10 Net Industrial Asking Rent per Square Foot



Source: CBRE

While the non-corridor region has been established as the leading industrial real estate market, the corridor region's office real estate market has greater access to downtown St. Louis and high concentrations of industry clusters including finance, professional services, and hospitals and

research. Although the non-corridor region has an additional 13 million square feet of total office space and three times the available office space, the corridor region has higher asking rents and lower vacancy rates. The gross asking price for office space per square foot for the corridor has increased through most of 2008, with a slight dip in the second quarter of 2009. The non-corridor office asking rent prices have remained relatively flat with limited variation in asking rents as illustrated in Figure E-11.

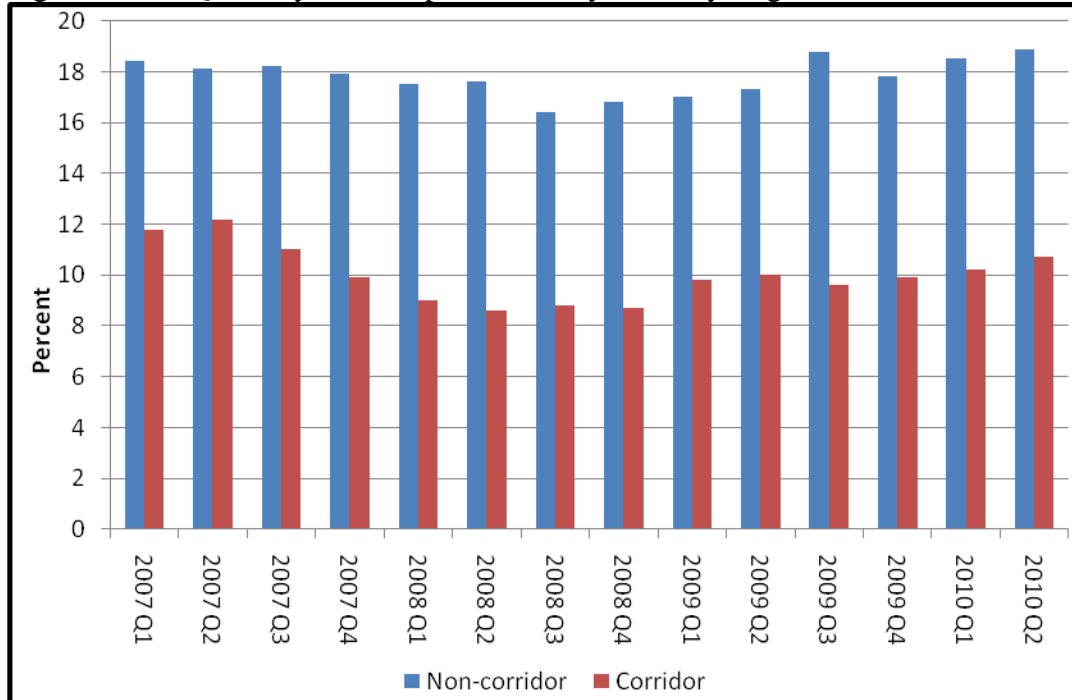
Figure E-11: Gross Office Asking Rent per Square Foot



Source: CBRE

In terms of office vacancies, the lowest office vacancy rates for the non-corridor region occurred during the third quarter of 2008. The office vacancy rates rose through most of 2009, and continued to increase through the first half of 2010. The corridor region has followed a similar trend; however, vacancy rates have not increased beyond the 12 percent high in second quarter 2007. Since 2007, the corridor region's vacancy rate has been on average 7.8 percentage-points lower than the non-corridor region, as seen in Figure E-12. Like industrial, office vacancies have increased in 2010 following the reopening of I-64.

Figure E-12 - Quarterly Office Space Vacancy Rates by Region



Source: CBRE

As for residential housing, the number of building permits for single-family housing in the St. Louis metropolitan area has increased since the major declines in 2008 and the first half of 2009, consistent with national trends⁹ but to a lesser degree. Since July 2010, building permits for single and multifamily housing in the St. Louis metropolitan area increased by 21 percent, 11 percentage-points more than the national average. This suggests that construction activity in the region is improving at a faster rate than the nation, although recognizing that St. Louis lost more than one-fifth of its construction workforce since 2008. While housing permits are on the rise in St. Louis and the nation, these increases do not offset the major drop experienced by the national housing market. The national housing market is still fragile during the slow economic recovery, and may become more volatile now that the federal housing tax credit expired in April 2010. According to the Census Bureau's new residential sales statistics, year-over-year sales for second quarter 2010 showed new home sales declined by seven percent nationally.

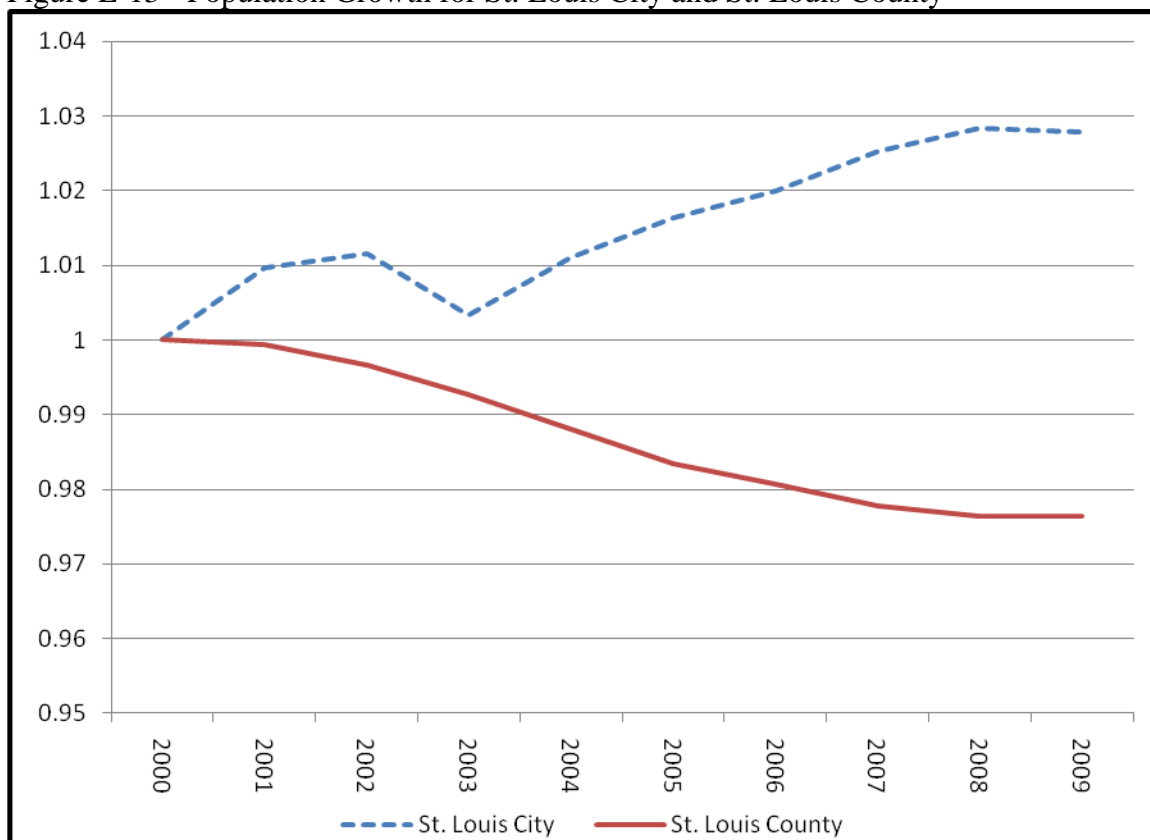
Population

St. Louis County's 2009 population of 992,408 is more than double the City of St. Louis' population of 356,587. Although the City and County are adjacent to each other, historic population trends have been different. The City of St. Louis has demonstrated a positive average annual growth of 0.3 percent from 2000 through 2009, while the county has seen a steady annual decline of -0.3 percent in overall population from its peak in 2000, as shown Figure E-13.

⁹ National Association of Homebuilders

Although the county's historic population trend is negative, the decline is less than one-half of one percent per year and has not shown any significant fluctuation since the start of the I-64 project. In contrast, the population in the city has historically grown from year to year until 2009 when it declined slightly. This demographic response is likely related to economic conditions, however, and not the closure of I-64.

Figure E-13 - Population Growth for St. Louis City and St. Louis County



Source: Census Bureau

Statistical Analysis

As discussed earlier, the I-64 corridor and St. Louis metropolitan area exhibited similar employment and sales trends as the rest of Missouri and the Nation. These mirroring trends were evident prior to the start of the I-64 project and continued once the project was initiated, which was also the beginning of the economic recession. Based on data that were available for the project period, trends suggest that the St. Louis metropolitan area was more likely experiencing the impacts of the decline in the housing market and the subsequent recession than an economic impact due to I-64's closure. The following statistical analyses will help determine whether this initial assessment is accurate.

The statistical analyses conducted for St. Louis utilized the following data: taxable sales, wages, employment, and unemployment rate. The quarterly data compiled were from 2000 through 2010 for Missouri, Nationally, City of St. Louis, and St. Louis County. The data for the corridor and

non-corridor areas were included in the analyses for the available years of 2007 through the end of 2009.

A first step in the analysis was the plotting of the data to visually assess whether there were any indications of relationships prior to or during the closures of I-64. The data plots from multiple regions confirmed that the overall trends between the corridor and other comparison regions followed similar trends before, during, and after the project period of December 2008 through December 2009.

Prior to the regression analyses, the average slope for the overall employment growth trend lines for each region was estimated. The slope represents the steepness of the trend line or the ratio of height change over the horizontal distance between two points on a line. As shown in Table E-1, all slopes are within the same relative magnitude, which implies that the corridor area employment trend is consistent with statewide and national trends throughout the project period.

Table E-1 - Slope of Employment Growth Index

	Slope
Corridor	(0.006)
Non-Corridor	(0.007)
Missouri	(0.006)
Nation	(0.005)

Source: HDR calculations

The taxable sales, as discussed previously, follow similar trends across all regions. The change in taxable sales for the corridor follows the same direction as the non-corridor and Missouri; all regions experienced spikes in taxable sales and decreases during the same quarters. While the trends in taxable sales growth are similar across regions, the magnitude of the shifts for the corridor region were often more significant. These exaggerated shifts reflect the relatively smaller nine ZIP code area that composes the corridor and the seasonal spike in sales for the fourth-quarter of each year.

As these economic indicators have shown, conditions before and during the I-64 closures are similar across all comparison regions, and impacts to the corridor could be influenced by a number of factors. In an effort to isolate those factors, regression analyses were conducted using the data depicted in the previous sections.

The regression analysis was performed to determine if the change in economic conditions varied before and during the project period. The regression analyses focused on the impact taxable sales, region location, and seasonality had on the dependent variables of the unemployment rate and employment growth. These dependent variables were chosen as they measure economic activity across all regions. Both unemployment rates and employment growth regressions were run separately as unemployment data is an estimate by place of residence and employment is an estimate by place of work establishment. The research team ran multiple regressions using both variables to determine if the statistical relationships changed when looking at employment concepts by place of work versus employment by place of residence. Additionally, independent 'dummy variables' were created to identify the corridor region and to account for seasonal and

annual changes. Dummy variables within a regression indicate a categorical difference in the data that may influence the outcome. The dummy variables in these regressions isolated the potential impacts location (within the corridor or not) and seasonality had on the unemployment and employment growth rates for the corridor, non-corridor, and state of Missouri.

The regressions found many of the variables were not statistically significant including the regional dummy variable, which re-enforces that the I-64 closures did not have a significant impact on the local economy. As the regressions demonstrated, the reconstruction of I-64 likely impacted the local economy temporarily, but the impact is relatively minor and not statistically significant. The analysis of transportation user cost helps quantify the size of these minor impacts to the local economy.

Business Surveys

Three online business surveys were created to evaluate the impacts and conditions business were experiencing due to the western and eastern closure of I-64. The survey questions were specifically designed to track conditions over time and determine the variations between the two separate closures.

The first business survey was released on February 18, 2008, shortly after the western portion of I-64 was closed. On June 17, 2008, the results of this first survey were presented to local economic development leaders in St. Louis. The comments from the economic development leaders were consistent with the conclusions of the published economic data. Economic development leaders were concerned with current national economic conditions that were becoming evident in St. Louis and were expected to make it difficult to isolate the impacts of I-64. The major concerns included the decline in available credit for businesses, high fuel prices, fluctuations in the housing market, the exchange rate and exports, all of which are points for the economic decline. The meeting also provided some positive feedback, similar to the interviews.

The second business survey was released on November 5, 2008, just before the reopening of the western closure and the start of the eastern closure. The third and final business survey was released on January 25, 2010, about one month after the eastern closure reopened and the New I-64 Project was considered complete.

Response

As the survey was online and specifically targeted toward businesses, rather than the general public, arrangements were made with the following local business organizations to facilitate as many responses as possible:

- St. Louis Regional Chamber and Growth Association (RCGA);
- Regional Business Council (RBC);
- Downtown St. Louis Partnership;
- Civic Progress; and
- St. Louis County Economic Council (SLCEC).

The organizations' combined distribution list included 6,000 contacts from 3,600 various businesses. The survey was advertised and distributed via e-mail and newsletters with reminder notices urging members to participate in the online business survey.

The first business survey received 369 separate and complete responses, the second received 84 responses, and the third survey had 111 responses. Although this response represents less than 10 percent of the total distribution list, there were obstacles that inhibited participation and completion of this web-based survey. First, some of the 6,000 contacts were duplicates or multiple contacts from the same business. Second, e-mail spelling may have been imprecise. Finally, some e-mails were filtered as spam or blocked by internet content blockers. Previous web-based surveys have reported failure rates for survey invitations ranging from a low of one to five percent in well-defined samples to as high as seven to 17 percent in less-than-well-defined samples.¹⁰ Because of these obstacles, the final number of people receiving the survey e-mail was likely less than 6,000.

As mentioned above, the response rate for the second and third surveys was much smaller, and therefore makes some of the more detailed comparisons between surveys difficult. The research team attributes this reduction in completed surveys to: a) business complacency and acceptance regarding I-64; and b) larger economic concerns regarding the recession.

Profile of Businesses Responding

On a percentage basis, the businesses responding were fairly uniform in terms of the industry type and the number of employees. As mentioned previously, the first business survey had a higher response rate than the second and third surveys. This could be attributed to the concern from businesses and residents prior to the initial closure, before the impact of the closure was apparent. The first survey had relatively high representation of corridor-based businesses; in all likelihood, their close proximity and relationship with the closed sections of I-64 prompted and motivated these businesses to complete a survey. As part of the survey, respondents were asked to indicate how close they were to the western closure in miles. For each survey, more than 80 percent of the total businesses that responded were within 10 miles of the western closure.

Results

The Table E-2 below summarizes some key statistics from each of the three surveys. Overall, 85 percent of respondents noted that they were "satisfied" with the execution of the New I-64 Project. Seventy percent of respondents contacted after the project was completed were "very satisfied" with MoDOT's execution of the project. An additional 23 percent indicated they were "satisfied" with the project's delivery.

¹⁰ Manfreda, Katja Lozar & Vehovar, Vasja "Survey Design Features Influencing Response Rates in Web Surveys" University of Ljubljana

Table E-2 - Business Survey – Selected Results

	<u>1st Survey</u> <u>(Feb 2008)</u>	<u>2nd Survey</u> <u>(Nov 2008)</u>	<u>3rd Survey</u> <u>(Jan 2010)</u>
Total Distributed	6,000+	6,000+	6,000+
Total Responses	369	84	111
Respondent location (based on zip code)			
Immediate I-64 region	23%	40%	40%
Satisfaction w/ MoDOT execution of project			
Very satisfied	46%	56%	70%
Satisfied	40%	40%	23%
No Opinion	10%	0%	2%
Dissatisfied	3%	4%	3%
Very dissatisfied	1%	0%	2%

Source: HDR Business Surveys

In addition to satisfaction with overall execution, all three surveys returned positive feedback (over 90 percent) on the performance of alternative routes. While less than half of the businesses surveyed were located in the nine ZIP code corridor region, 86 percent of businesses in the first survey were located within 10 miles of the New I-64 Project. Eighty-eight percent of businesses in the second survey and 81 percent in the third survey were located within that same distance. These results indicate that a large portion of the businesses that responded to the survey were located in an area that was potentially impacted by the I-64 project through either providing access to commuters, shippers, or customers.

Summary of survey results from key areas

Commuting Impacts

- The third survey found the majority (51 percent) of businesses are experiencing limited effects on employee commuting behavior due to the closure, which is consistent with previous survey results.
- At the start of the western closure 41 percent of the respondents indicated noticeably earlier or noticeably later commute times, while at the end of the western closure (second survey) respondents reported a 32 percent earlier or later commute. During the eastern closure 23 percent of respondents noticed a later commute time while 29 percent reported earlier commute times.
- During the western closure, 27 percent of respondents found a significant increase in commuter time or cost, followed by 14 percent during the first portion of the eastern closure. During the eastern closure of I-64, 69 percent of respondents reported a minor (46 percent) or significant (23 percent) increase in commute times or cost, with 30 percent seeing no change.
- After the reopening of I-64, 62 percent of respondents confirmed that commute times have been noticeably reduced.

- Of the businesses surveyed 85 percent implemented new commuter benefit programs. The large number of businesses who have implemented new commuter benefit programs may be correlated to “self-selection” as the businesses who are the most actively engaged in this type of activity may also be the ones most likely to respond to a survey on I-64. The two largest commuter benefit categories reported were telecommuting and flextime.

Transportation Costs

- During the western closure, 52 percent of respondents indicated transportation costs were not rising, and 94 percent attributed any rise in transportation costs were related to travel time delays.
- During the eastern closure, 19 percent of respondents reported an increase in freight shipping costs, while 77 percent reported an increase in travel time and delay.
- Following the reopening of I-64, nine percent of respondents reported a minor decrease in freight shipping costs, and 47 percent reported a minor or significant decrease in travel time and delay.
- Despite almost half of the businesses reporting an increase in transportation costs, less than 10 percent of respondents from all three surveys claimed to participate in the MoDOT outreach grant program.

Sales, Visitation and Economic Activity

- During the western and eastern closures, respondents reported a decline in sales and business activity. However, following the reopening of I-64 respondents noted that there was either no change in sales and business activity or the change in sales was not relevant.
- The first survey found nine percent of all businesses cited a lower volume of weekly sales. This percentage jumped to 17 percent by the second survey, and dropped to four percent in the third survey.

Commute

During the western and eastern closures, respondents were asked exactly how employee commute behavior changed during each closure of I-64. Both surveys found corridor and non-corridor businesses were not experiencing major changes. The most frequently noted change was employees shifting their commute times to either earlier or later in the day. Following the reopening of I-64, 62 percent said that commute times were noticeably reduced with another 31% citing no change.

Flextime and telecommuting were the two major benefits offered by businesses during the construction of I-64. A larger portion of businesses reported more telecommuting options during the western closure than during the eastern closure. This shift away from telecommuting could be influenced by the notion that the impacts on traffic may have been less than originally anticipated.

Transportation Costs

Although the measurable commuter impacts to business respondents were relatively minor, respondents consistently noticed an increase in transportation costs and delay. Not surprisingly, all three surveys’ respondents noted a rise in fuel costs, but this can be only indirectly related to

I-64. While the rise in fuel costs per unit is apparent, the actual impacts related to I-64 are a result of longer distances traveled through detours around the closure or by an increase in stop-and-go traffic conditions. Eighty-one percent of respondents reported no change in freight shipping costs during the eastern closure and 85 percent following the reopening of I-64.

Satisfaction

Following the closure, the level of satisfaction with the performance of I-64's closure and alternative routes were very high, especially when considering the number of businesses experiencing at least a minor rise in transportation costs. The response was similar across all three surveys and time periods, with each survey finding over 86 percent of respondents either satisfied or very satisfied. The results show that despite the rise in cost attributable to an increase in travel time, businesses coped with the closure and to a large extent were satisfied with the project delivery. Although there have been proactive steps made by MoDOT and many of the local businesses, the sentiment still seems the same: travel delays and costs were higher during the closures but were not significant enough to drastically change behavior.

Sales and Visitors

All three surveys found that over 78 percent of businesses reported the change in customers, visitors, and patients were either not relevant or not noticeable. Only four percent of respondents noted a lower volume of customers, which is down from 21 percent from the second survey as seen in Table E-3. The majority of respondents noted no change in visitors and sales and high levels of project satisfaction despite increases in travel time and transportation costs.

Table E-3 - Change in Weekly Sales and Customers

	First Survey (Feb 2008)		Second Survey (Nov 2008)		Third Survey (Jan 2010)	
	Sales	Customers	Sales	Customers	Sales	Customers
Lower Volume	9%	12%	17%	21%	7%	4%
Higher Volume	1%	1%	1%	1%	4%	10%
No Change	57%	60%	58%	54%	47%	56%
Not Relevant	33%	26%	24%	24%	43%	30%
Total	100%	100%	100%	100%	100%	100%

Source: HDR Business Surveys

Interviews

During the New I-64 Project, interviews were held with transportation-dependent businesses in and near the I-64 corridor. Interviews with these stakeholders were completed by HDR and summaries of the findings were included in the 2009 Annual Report. The following section includes those interviews; no subsequent interviews have been conducted.

During the initial phases of the New I-64 Project, HDR conducted in-depth interviews with transportation-dependent businesses in and near the I-64 corridor. Different industry groups were targeted, with significant help from the St. Louis Regional Chamber and Growth Association (RCGA), to provide a detailed and in-depth range of private sector businesses that are being impacted by the I-64 closure. The interview questions also attempted to gauge the steps that

businesses took to cope with the closure. At least one representative from the following local businesses and organizations was interviewed, as shown in Table E-4.

Table E-4 - Industries Interviewed

Industry	Transportation Needs ¹¹	Employees ¹²	Locations
Utilities	On-site technicians	1,000+	Multiple
Network Hospital	Patient access	1,000+	Multiple
Distributors	Freight shipments	<1,000	Multiple
Parcel Shippers	Freight shipments	1,000+	Multiple
Rental Car Agency	Customer access	<1,000	Multiple
Catering	Delivery	<50	Multiple
Research laboratories	Commuter access	1,000+	Multiple
Convention Center	Visitor access	<1,000	Single
Museum	Visitor access	<1,000	Single
Accommodation	Visitor access	<100	Single

The interviews found businesses expected the worst prior to the closure, but the conditions for the first quarter were not nearly as bad as they anticipated. To cope with the closures many of the businesses with a large commuting labor force offered flex-time hours or telecommuting options, encouraged carpooling or public transit, and, in some cases, provided public transit passes. Businesses reported that impacts to peak commute times were largely negligible.

In terms of operations, businesses with delivery schedules had planned for additional travel time per delivery into the impacted areas, but they found that the additional delivery time was unnecessary. Onsite service industries, such as utilities, track emergency response time statistics and these statistics showed emergency response times were not impacted by the western closure.

Those interviewed were asked if they were satisfied with MoDOT's delivery of the I-64 project and how it has impacted sales, visitation, and operations. The interviews found that many businesses were pleased with the delivery of the project and support activities including: MoDOT's outreach and planning, the timing of traffic signals to improve traffic flow, and the amount of information available to the public.

Transportation Analysis - User Costs

Background

The New I-64 project required the complete closure of two separate approximately 5-mile spans of roadway that are essential connectors to downtown St. Louis. In 2007, the year before the closures, average weekday traffic was slightly less than 130,000 vehicles on the section of highway that would become the western closure and nearly 139,000 on the eastern closure portion. In typical single-lane closure projects, there will be some diversion due to reduced road capacity; however in this case, all vehicles were diverted away from each closed segment. This diversion had the potential to cause significant impacts, through longer detour routes as well as the additional travel time associated with the detours. This analysis of transportation related user

¹¹ Please note commuter access was cited as a transportation need by all industries

¹² Employee ranges are for non-disclosure purposes

costs was performed to quantify the impacts of the full closures, and determine whether the closures placed significant downward pressure on the economic conditions in the corridor.

Methodology

Minute-by-minute traffic counts were provided for all of the major interstates and some arterials for 2007, 2008, and 2009 from MoDOT and traffic.com. Traffic count data for the arterials was not as comprehensive as the interstate data and therefore not all arterials could be considered in the analysis. Traffic data was aggregated and the average weekday traffic was calculated for 2007, 2008 and 2009. Overall, it was assumed that 10 percent of traffic that would have traveled on I-64 was lost to other modes, such as transit, or the trips were no longer taken.

The traffic count data available was for singular points along each roadway, the project team created the most likely diversion routes in order to determine change in distance traveled. These diversion routes were developed using knowledge of the area and by examining the changes in traffic counts during the closures to determine the traffic patterns. Roadways with no traffic counts, either prior to the closure or during the closures, were omitted from the analysis, potentially underestimating the impacts.

The transportation analysis for both closures measured the change in vehicle miles traveled (VMT) and additional travel time due to the closure, measured in vehicle hours traveled (VHT). The VMT based impacts include emissions, pavement maintenance, and vehicle operating costs. Crash related costs are typically considered, but it was found that there was actually a reduction in crashes during the closure period, so they were not considered for this analysis.

Emissions costs are those related to exhaust from automobiles and trucks. The emissions considered are carbon monoxide, volatile organic compounds, nitrogen oxides, particulate matter, sulfur dioxide, and carbon dioxide. Emissions rates are calculated using the EPAs Mobile6 tool to determine rates specific to the climate conditions in the area. Rates vary for automobiles and trucks, and the costs are measured in dollars per ton of emission. According to MoDOT figures, approximately 13 percent of the traffic on I-64 prior to the closure was truck traffic. For purposes of this analysis, it was assumed that truck diversion only occurred on the Interstates and not the arterials.

Pavement maintenance costs are those costs incurred to maintain the road surface, calculated on a per mile basis. The wear-and-tear on pavement from trucks is more substantial than from automobiles, and thus the cost of maintenance per truck-mile is significantly greater than the cost per automobile-mile, \$0.12 and \$0.001 respectively¹³. These maintenance costs per vehicle mile were obtained from the Addendum to the Federal Cost Allocation Study and adjusted to 2010 dollars using the BLS Consumer Price Index (CPI). Vehicle operating costs are incurred to the user; these costs include fuel, oil, maintenance and repair, depreciation, and tires. Again, these costs vary between truck and auto.

Travel time costs represent the costs incurred for time spent traveling that could be otherwise spent, and is based on VHT. The trip purpose is divided between personal and business, and the

¹³ "Addendum to the 1997 Federal Highway Cost Allocation Study Final Report" Federal Highway Administration May 2000

value of time is calculated accordingly. For business purposes, travel time is valued at the regional average hourly wage rate. For personal trips, travel time is valued at half of the prevailing wage rate. For the closure periods, the wage rate was provided by MERIC's custom data tabulation of the QCEW. For the western closure the average wage in 2008 was \$22.21 in 2010 dollars, and for the eastern closure it was \$21.90.

Issues and Constraints

One of the major limitations of this transportation analysis is the change in the overall economy. Due to the recession, the overall level of traffic decreased during the study period. Despite the decrease in overall traffic, several of the alternate routes during the closure still experienced higher traffic levels.

While it would have been ideal to conduct a detailed assessment of the travel time impacts, accounting for additional congestion on the impacted roads, this was not possible due to the constraints posed by the traffic data. Because of this, a simple analysis of the additional time necessary to travel the diversion routes was only considered.

Results

All impacts are incremental, meaning that they are over and above what was occurring before the closures. For example, if a commuter previously travelled on the closed portions of I-64, only the distance this commuter was diverted is considered in the analysis.

The western closure impacted 129,000 vehicles daily, 116,000 of which were not lost to other circumstances and were thus diverted to other roads. With the available interstate and arterial information, 99,000 of these vehicles were accounted for. The unaccounted vehicles are likely on arterials that did not have traffic counts, and thus are not included in this analysis. From the given information, the primary impacted roadways that were accounted for are: Clayton, Ladue, I-270, I-170, I-44 and I-70. While there are certainly other roads that were impacted, the lack of information does not allow for any calculations to be completed related to these roads. Due to Clayton's proximity to I-64, there were no additional miles incurred to travel on this road, so the impacts are not counted in this incremental analysis.

The results of the western closure analysis indicate that the vehicle operating costs associated with the 248 weekday closure were \$16 million for autos and \$12 million for trucks. Pavement maintenance costs incurred an additional \$43,000 for autos and \$1.3 million for trucks, and emissions generated \$2.3 million in costs from autos and \$4.9 million from trucks. The additional travel time resulted in delay costs of \$15 million for the closure, not including congestion costs. Thus, the total impact of the western closure was \$51.9 million for the year.

The eastern closure began immediately upon the western closure's reopening and lasted for 255 weekdays. Prior to the closure, there were approximately 138,000 daily vehicles, of which approximately 125,000 were diverted during the closure period. The available data for the eastern closure accounted for approximately 120,000 of these, indicating that most of the impacted roads were accounted for. The primary roads seeing additional vehicles were Clayton, Delmar, Big Bend, Forest Park, I-170, I-270, I-44 and I-70.

The results of the eastern closure analysis indicate that the vehicle operating costs associated with the closure were approximately \$17.5 million for auto and \$9.5 million for truck. Pavement maintenance cost were approximately \$47,000 for autos and \$1.2 million for trucks while emissions costs totaled \$2.4 million for autos and \$3.4 million for truck. Total travel time related costs were \$15.7 million. In total, the eastern closure cost \$49.6 million for the year, as Table E-5 shows.

Table E-5: Transportation Impacts (in millions of dollars)

	Western Closure	Eastern Closure
VOC	\$28.24	\$26.98
Pavement Maintenance	\$1.35	\$1.07
Emissions	\$7.20	\$5.82
<i>Total VMT Related</i>	\$36.79	\$33.86
VHT Costs	\$15.09	\$15.73
Total	\$51.89	\$49.59

Source: HDR Calculations

Overall, the highway and road network in St. Louis was very conducive to a project such as this, as there were many available alternate routes that could handle the additional volume that would be diverted due to complete closure of one of the major routes. While the impacts, \$101.5 million over two years, may seem high, the costs of maintaining traffic along I-64 through single or two-lane closures would likely be even greater, as the travel time would increase greatly, and the emissions and operations costs would vary due to the slower speeds as well. The following alternative construction scenario analysis estimates the impact of reconstructing I-64 using a more conventional construction schedule.

Alternative Construction Scenario Analysis

Since the actual New I-64 project followed an innovative accelerated construction schedule, a set of alternative construction schedules was developed to determine the potential cost savings of the accelerated construction schedule. This analysis of alternative construction schedules compares user costs of partial long-term lane closures to the actual full closure of I-64. Alternative construction schedules were developed for a six and eight year construction period. For each alternative scenario there would be staged lane closures for sections of I-64 with traffic continuing to use two lanes in each direction at reduced speeds. The estimated user costs, in present value, for the actual design-build project and the two alternative project construction schedules are shown in Table E-6.

Table E-6 - Transportation Impacts – All Scenarios in PV (in millions of dollars)

Partial Closure	Actual	6 Year	8 Year
VOC	\$55.2	\$46.2	\$59.2
Pavement Maintenance	\$2.4	\$3.0	\$3.9
Emissions	\$13.0	\$12.6	\$16.1
<i>Total VMT Related</i>	\$70.7	\$61.9	\$79.2
VHT Costs - Diverted	\$30.8	\$17.7	\$22.6
VHT Costs - Delay	-	\$67.5	\$86.5
<i>Total VHT Costs</i>	\$30.8	\$85.2	\$109.1
Total	\$101.5	\$147.0	\$188.3

Source: HDR Calculations

The actual reconstruction project fully closed sections of I-64, diverting all traffic, thereby increasing VMT. This resulted in higher per-year VMT related costs than the alternative construction options. Under the alternative construction schedules, users would still be able to travel on the sections of I-64 during reconstruction, albeit at a reduced speed and highway capacity, which reduces the amount traffic diversion that occurred under the actual full closure. The reduced speeds and increased congestion due to lower capacity along I-64 under the alternative scenarios represent the largest category of user costs. By extending the I-64 project schedule to 6 years, total user costs increase by \$45.6 million or as much as \$86.8 million if the project schedule were extended to 8 years.

The final construction cost of the actual full closure of I-64 was approximately \$427.5 million. For comparison, the construction cost schedules were estimated from the project scoping cost estimates in the I-64 Environmental Impact Statement (EIS) of \$670.4 million and placed into present value. The estimated costs in Present Value (PV) are \$520 and \$614 million for the 6 and 8 year construction alternatives respectively.

The potential construction costs savings from initiating a full closure of I-64 versus a six or eight year staged reconstruction is \$93 to \$187 million, assuming construction material costs were to remain consistent with inflation. If construction material costs were to return to levels of high cost escalation experienced from 2003 to 2008, the alternative construction (6 and 8 years) cost schedules could see a dramatic increase in cost. The results show that the actual I-64 reconstruction project benefited from an accelerated project schedule, as the alternative scenarios have greater construction costs, cost escalation risk, and user costs due to the longer construction schedule.

Conclusions

Communications

The Eastern closure in 2009 had a noticeable impact on respondent behavior and travel habits.

- A sizeable minority reported changes in their shopping and driving habits
- Many respondents reported slightly longer daily commutes compared to pre-construction period
- Majority of respondents are satisfied with how they are able to get around St. Louis (60 percent)

- Overwhelming majority of respondents are satisfied with MoDOT's decision to close parts of I-64 for two years instead of taking 6-8 years with lane closures (83 percent in the lowest measurement, 96 percent in the highest both up when compared to 2008)
- Overall, the respondents have a high level of satisfaction with how the I-64 closure has been handled (78 percent)
- The overwhelming majority of responses received are very satisfied/satisfied when asked about the delivery of timely, accurate and understandable project information (86 percent)

Considering the reported changes in respondents' behavior, these are extremely high levels of satisfaction and reflect the public consensus that this project was well planned and delivered within the "promised" 2 year period.

Mobility

The following are our findings from the Eastern closure period in 2009:

- Traffic volumes (2009 compared to 2007) along I-70 decreased west of I-170, but increased east of I-170. Traffic volumes along I-270 south of I-64 increased by 30,000 to 40,000 vehicles per day. I-44 also experienced an increase in traffic volumes, ranging from an increase of 22,000 vehicles per day east of I-270 at Lindbergh Boulevard to an additional 7,000 vehicles per day near Jefferson Avenue. I-170 experienced increases between 7,000 and 15,000 vehicles per day. I-64 west of I-270 experienced increases ranging between 8,000 and 11,000 vehicles per day.
- Travel speeds (2009 compared to 2007) have remained about the same even with the increases in traffic volumes mentioned above. There were slight decreases in travel times along some of the region's freeway network. Improvements in the operation of these adjacent roadways were the result of some of the pre-closure improvements and regional coordination across city/county/state agencies.
- Parallel arterial routes experienced increases in traffic volumes as well as travel time (2009 compared to 2007). East-west arterial corridors, such as Manchester Road, Forest Park Parkway and Olive Street, realized increases of between 10,000 and 20,000 vehicles per day. North-south arterial corridors such as Hanley Road and Lindbergh Boulevard experienced a slight increase in traffic volumes and travel times.
- The RideFinders Rideshare program experienced a significant increase through most of 2008 as it approached the 10,000 membership plateau in November. In 2009, rideshare for both carpool and vanpool users dropped slightly or remained the same from the end of 2008. The increase in 2008 and stability in 2009 most likely means that the change in the Rideshare program could be a combination of gas prices, economic conditions and/or the I-64 project.
- Usage of commuter park-and-ride facilities in Missouri returned to similar levels experienced in 2007 demonstrating that park-n-ride facilities were most likely impacted in 2008 by higher gas prices and the economy, not significantly by the I-64 closure.

Based on the evaluation of regional mobility, the study team concluded the traffic volume increased on alternative routes that caused a slight increase travel times and decreased travel

speeds. Regional planning and improvements to alternative routes significantly reduced and minimized travel impacts.

Crash Analysis

The major conclusions from the crash analysis and crash rate analysis are as follow:

- Comparing the average number of crashes for the pre-closure period (2004 through 2007) to the closure period (2008 and 2009) found the following results. The number of crashes increased (ranging from 2 to 8 percent) on five (5) roadways (I-44, I-55, I-70, MO D and MO 100) in 2008 and increased (ranging from 0.1 to 16 percent) on four (4) roadways (I-70, MO 100, MO 155 and MO 141) in 2009. Whereas the crash numbers decreased (3 to 52 percent) for the remaining twelve (12) roadways in 2008 and decreased (4 to 73 percent) for the remaining thirteen (13) roadways in 2009.
- Comparing the average crash rates for the pre-closure period (2004 through 2007) to the closure period (2008 and 2009) found the following results. The crash rates increased (2 to 9 percent) for four (4) roadways (I-55, I-70, MO D and MO 100) in 2008 and increased (0.1 to 16 percent) for five (5) roadways (I-70, MO 100, MO 115 and MO 141) in 2009. Whereas the crash numbers decreased (0.7 percent to 50.5 percent) for the remaining thirteen (13) roadways in 2008 and decreased (23 to 72 percent) for the remaining twelve (12) roadways in 2009.
- With regards to I-70 and MO 100, the increasing trend started before the I-64 closure (i.e., before 2008). Based on these pre-closure trends, it was difficult to imply that the I-64 closure caused an increase in crashes and crash rates for these roadways.
- Although each route shows its own trend, the overall crashes on all three types of roadways (i.e. freeways, expressways and major arterials) have decreased in both 2008 and 2009.
- The significant crash reduction along I-64 segments (50 to 70 percent) that were not closed could be a good indicator on the region's awareness of the project and their willingness in using designated alternative roadways.
- Crash data evaluation for Routes D and 340, found noticeable safety improvements in 2009 that could have been caused partially by the increase arterial management implemented along these corridors.
- In general, rear-end type crashes (the most recorded crash type) decreased noticeably from 7,757 in 2007 to 6,728 in 2009.
- The average number of crashes per year across the 4-year pre-closure period was 16,595 compared to 15,111 in 2008 (9 percent below average) and to 14,155 in 2009 (15 percent).
- Based on the evaluation of crash numbers and rates and their associated trends along the 17 major diversionary roadways, the study team concludes that there was no evidence that the closure contributed to any increases in crashes and crash rates.

Economics

The Congressional Budget Office (CBO) is projecting the economic recovery will continue at a modest pace during the next few years, and projects that the economy will grow by two percent from the fourth quarter of 2010 through the fourth quarter of 2011.¹⁴ CBO anticipates national unemployment levels will not return to five percent until 2014. The St. Louis area appears to be following this national trend and forecast.

From the analysis of economic conditions, business surveys, and user transportation costs, the following represent the major results:

- The reconstruction of I-64 created more circuitous routes for commuters during closures thus reducing average speeds and increasing vehicle miles traveled;
- During reconstruction 98,000 to 120,000 vehicles were diverted daily and transportation user costs increased by \$101.5 million during entire project. This represents less than 4.4 percent of the total transportation spending in St. Louis during the I-64 closure period (2008 through 2009);
- Alternatively, if I-64 had been reconstructed using a more conventional phased construction period of 6 to 8 years, user costs would have increased from additional traffic delays over the full-closure costs by \$45.6 to \$86.8 million;
- The project demonstrated a significant cost savings – between \$92 and \$187 million – from accelerating the reconstruction project schedule to two years versus a six or eight year staged construction schedule;
- Businesses expected the worst, but the conditions during the western and eastern closures were not as bad as they anticipated. Design-Build delivery and an aggressive project schedule were successful in minimizing the duration of impacts to the region;
- While the economic recession made the assessment difficult to determine the precise impact of the I-64 reconstruction, the analysis found the impacts to the corridor region were no different than economic conditions across Missouri and the nation;
- The evaluation of economic conditions, statistical analysis, business surveys, and transportation analysis of user costs has demonstrated that the impacts of the New I-64 Project on the regional economy were relatively minor compared to an alternative long-term project schedule;
- All three surveys reported high-levels of satisfaction (all above 86 percent) with the I-64 project. The final survey found that 93 percent of responding businesses were satisfied with the project as the sections of I-64 closest to downtown St. Louis were reopening;
- Throughout the project, approximately half of the businesses responding found no change in sales or customers.

Given that I-64 has only been reopened for a short period of time, and that the economy is still recovering from the recession, revisiting this study to evaluate the long-term impacts could provide an indication of future project benefits from this major transportation project.

¹⁴<http://www.cbo.gov/doc.cfm?index=11705>

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Appendix A

The New I-64 Economic and Regional Mobility Study

Communication Assessment: Results from the Third and Final Mailed Survey

Project RI07-047



April 2, 2010

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Executive Summary

Ten thousand surveys were distributed to residents in the St. Louis area for this third and final mailed survey concerning the New I-64 project. Thirty-two zip codes were selected to be surveyed for the third and final survey. This selection included the same zip codes used in the previous two surveys as well as a few additional zip codes from further along the I-64 corridor. The number of responses from each zip code varied from a low of 19 (63133) to a high of 99 (63117). By the end of March, we had received 1,559 responses from the final mailed survey. This response rate, 15.6%, was the highest of the three mailed surveys distributed throughout this research.

The study captured overall changes in resident behavior from before the construction work began with how residents behave after the project was completed. **Many respondents changed their behavior in some ways due to the project.** Specifically, residents changed where they shop (29.0%), buy gas (14.6%), bank (3.8%), eat out (24.8%), how often they travel to certain areas (58.4%), where they worked (4.3%), and where they lived (3.7%).

Over three quarters of the respondents stated that the closure did not have a long-term impact on their work habits. In other words, after the project was completed, 77.2% of the respondents still worked the same hours in the same location as they did before the closure. 4.1% of the respondents shifted their work hours. Another 3.5% now work from another location (home, another office, etc.) more often. 1.4% quit their job and now work somewhere else. 6.3% indicated that the closure had an impact on their work habits that was not otherwise captured by the survey.

Respondents were asked to indicate their level of satisfaction (or dissatisfaction) with eight different measures. **In general, St. Louis area residents showed extremely high levels of satisfaction with the New I-64 project.** Specifically, the majority of respondents were satisfied with how well they were kept informed (97.7%), the timeliness of the New I-64 information that was made available (97.6%), how alternative travel options were communicated (90.3%), the traffic flow within the New I-64 Project construction work zones (77.4%), how understandable and accurate were the work zone signs (90.4%), how well they could move around the St. Louis area during the closure (76.7%), the decision to close I-64 for two years opposed to take six to eight years to complete the project with lane closures (95.1%), and were overall satisfied with how the New I-64 Project closure was handled (94.6%).

Television news was the best method for MoDOT to communicate project information according to 78.1% of respondents. A majority of respondents also suggested road signs near the closed highway (54.5%), radio news (53.5%) and newspapers (51.1%). Only 38.9% of the general public said the internet was an effective way for MoDOT to communicate with them.

Overall, the project caused very little change in how people commuted. Where differences exist, they are usually quite small (on the order of 1% or less). Interestingly, there was a small, but noticeable decrease in the number of people who commuted via mass transit (bus, Metrolink), by biking, and by walking. In previous surveys, there was an increase in these driving alternatives during the construction project (part of which also corresponded with very high fuel prices). Based on the previous findings, it appears that the experience of commuting by bus has decreased the number of commuters willing to consider these alternatives if they have a viable option. However, there was a slight increase in the number of people who regularly telecommute after the project completion. While outside the scope of this project, these findings suggest that the only way that most residents will willingly stop driving to work is if they can telecommute.

Residents were asked how long most trips in the area took after the project was completed compared to before construction began. **58.2% of respondents noticed a significant improvement (more than five minutes faster) in travel time.** Another 38.1% did not notice a significant change. Only 3.7% of respondents stated that the change had resulted in a significant increase (more than five minutes slower) in travel time.

Five demographic questions were asked of all respondents. Two related to their driving habits (how often they traveled on the New I-64 and the zip code of their destination). 62% of the respondents frequently drove on the improved section of the interstate. 27% rarely drove on it and 11% stated they never drove on this section of I-64. Those who knew the zip code of the place they most frequently drove provided 119 different zip codes. The other three questions (gender, ethnic group, age group) were asked to ensure the study captured people from all groups of people in the area. **These goals were achieved, a diverse group of respondents participated in the study.** There was ample minority participation in the study, 21.3% of the responses came from an ethnic minority. Both genders were well represented in the research, with a majority (57.0%) being female. Most (58.6%) respondents were between 41 and 65 years of age and the sample range included drivers under 18 and over 65.

In summary, this survey captured the opinions of the St. Louis area residents concerning the New I-64 project. The two-year project changed the behavior of many residents, although it had little long-term impact on their work or commuting habits. **Overall, 94.6% of residents were satisfied (49.4%) or very satisfied (45.2%) with how the New I-64 Project closure was handled.**

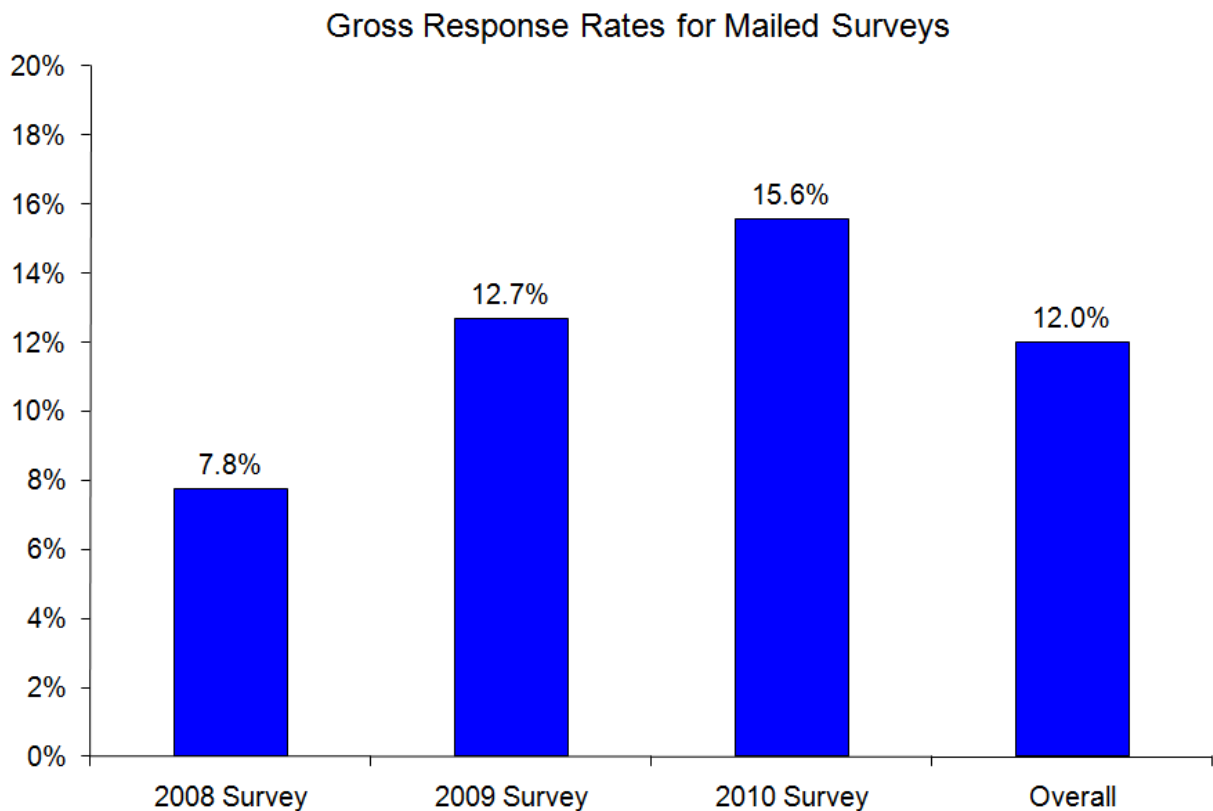
Background

As part of the Communication Assessment portion of the New I-64 Economic and Regional Mobility Study, three distinct surveys were each mailed to 10,000 residents in the St. Louis area that were potentially affected by the project. The first mailing was conducted in January 2008 and pertained to the western closure (the section of I-64 from Ballas Road to I-170). The second mailing was conducted in January 2009 and pertained to the eastern closure (the section of I-64 between I-170 and Kingshighway Boulevard). The third and final mailing was conducted in January 2010 and pertained to the completed project after it was reopened on December 7, 2009.

The survey questions were developed in conjunction with MoDOT and were designed to meet several goals. First, each mailing was intended to capture the impact of each part of the project (that is, the western closure, the eastern closure, and the overall project). Second, other than adjusting descriptions of what was recently closed and/or reopened, the questions for each mailing were generally identical to allow comparisons across surveys. A few questions differed as feedback from previous surveys suggested questions for future surveys. Third, the mailed surveys were intended to ensure that the general input of all local residents, over all demographics, were captured.

Responses

For the first mailing, 10,000 residents were randomly surveyed from multiple local zip codes of interest. 776 responses were received. For the second mailing, these 776 respondents were included as well as 9,224 randomly selected individuals in the zip codes of interest. The initial respondents were included in the second reason for two reasons. First, this gave us the opportunity to look for changes in opinion over time for specific individuals, not just general opinion. Second, it was thought that sending surveys to those who had previously returned a survey would be more likely to generate a response. This turned out to be the case and we received 1,269 responses from the second survey. We followed the same methodology for or the third and final mailing. In January 2010, we mailed new surveys to the 1,269 people who had responded to the second mailing as well as 8,731 randomly selected individuals in the zip codes of interest. By the end of March, we had received 1,559 responses from the final mailed survey.



Home Zip Codes

Thirty-two zip codes were selected to be surveyed for the third and final survey. This selection included the same zip codes used in the previous two surveys as well as a few additional zip codes from further along the I-64 corridor. The number of responses from each zip code varied from a low of 19 (63133) to a high of 99 (63117).

Zip Code	Responses	Percent
63101	60	3.8%
63102	22	1.4%
63103	55	3.5%
63104	55	3.5%
63105	94	6.0%
63106	23	1.5%
63107	22	1.4%
63108	72	4.6%
63109	69	4.4%
63110	50	3.2%
63111	20	1.3%
63112	49	3.1%
63113	27	1.7%
63115	22	1.4%
63116	36	2.3%
63117	99	6.4%
63118	40	2.6%
63119	79	5.1%
63120	20	1.3%
63123	54	3.5%
63124	61	3.9%
63125	30	1.9%
63130	72	4.6%
63131	60	3.8%
63133	19	1.2%
63136	20	1.3%
63137	29	1.9%
63139	68	4.4%
63141	69	4.4%
63143	69	4.4%
63144	68	4.4%
63147	26	1.7%

Question 1: Overall Change in Behavior

The first question captured overall changes in resident behavior from before the construction work began with how residents behave after the project was completed. Specifically, residents were asked if the closure had changed where they shop, buy gas, bank, ate out, how often they travel to certain areas, where they worked, and where they lived.

The closure has changed where I shop

Approximately twenty-nine percent of the respondents developed new shopping habits during the closure that they are currently maintaining after the project has been completed.

	Frequency	Percent
Strongly Disagree	472	33.8%
Disagree	519	37.2%
Agree	246	17.6%
Strongly Agree	158	11.3%
Total	1,395	100.0%

The closure has changed where I buy gas

Almost fifteen percent of the respondents found new places to purchase gas during the closure that they are currently continuing to frequent after the project has been completed.

	Frequency	Percent
Strongly Disagree	591	42.8%
Disagree	587	42.5%
Agree	124	9.0%
Strongly Agree	78	5.7%
Total	1,380	100.0%

The closure has changed where I bank

Just under four percent of the respondents developed new banking habits during the closure that they kept after the project has been completed.

	Frequency	Percent
Strongly Disagree	710	51.6%
Disagree	613	44.6%
Agree	26	1.9%
Strongly Agree	26	1.9%
Total	1,375	100.0%

The closure has changed where I eat out

Approximately twenty-five percent of the respondents tried new restaurants during the closure that they are continuing to frequent after the project has been completed.

	Frequency	Percent
Strongly Disagree	498	35.9%
Disagree	547	39.4%
Agree	256	18.4%
Strongly Agree	88	6.3%
Total	1,389	100.0%

The closure has changed how often I travel to certain areas

Almost sixty percent (58.4%) of the respondents have changed their behavior due to the project. This is the most general of the overall change questions and should show the highest impact as it incorporates all of the specific changes that were asked of the respondents as well as any other changes that the survey did not otherwise capture.

	Frequency	Percent
Strongly Disagree	298	20.7%
Disagree	303	21.0%
Agree	540	37.4%
Strongly Agree	302	20.9%
Total	1,443	100.0%

The closure has changed where I work

Slightly over four percent of the respondents found new places to work during the closure that they kept after the project has been completed. More details about this subject are documented under *Change in Work Habits* on page 12.

	Frequency	Percent
Strongly Disagree	786	60.2%
Disagree	464	35.5%
Agree	32	2.5%
Strongly Agree	24	1.8%
Total	1,306	100.0%

The closure has changed where I live

Almost four percent of the respondents found new residences during the closure that they are currently kept after the project has been completed.

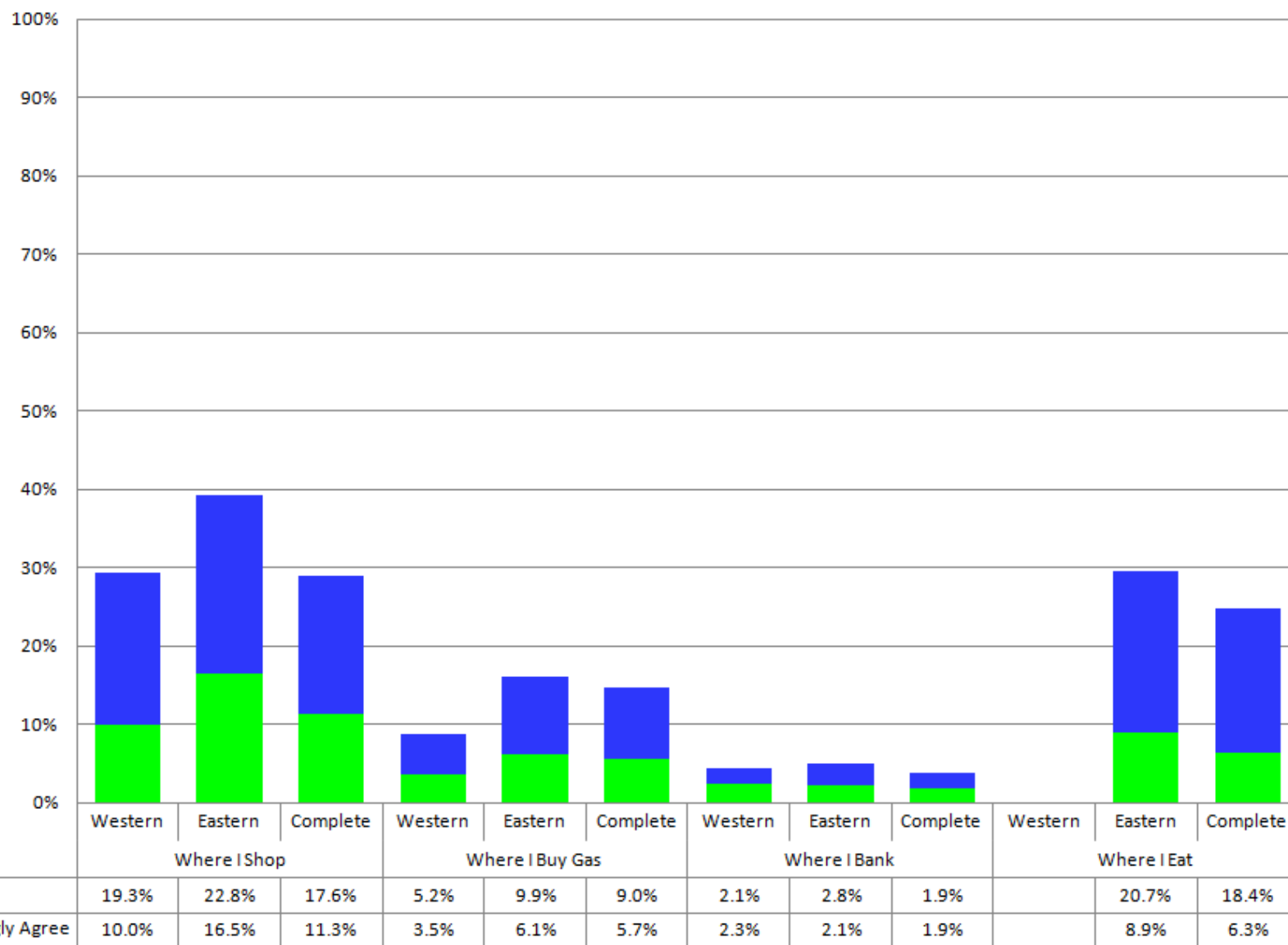
	Frequency	Percent
Strongly Disagree	848	61.7%
Disagree	475	34.6%
Agree	30	2.2%
Strongly Agree	21	1.5%
Total	1,374	100.0%

Project Review: Change in Overall Behavior

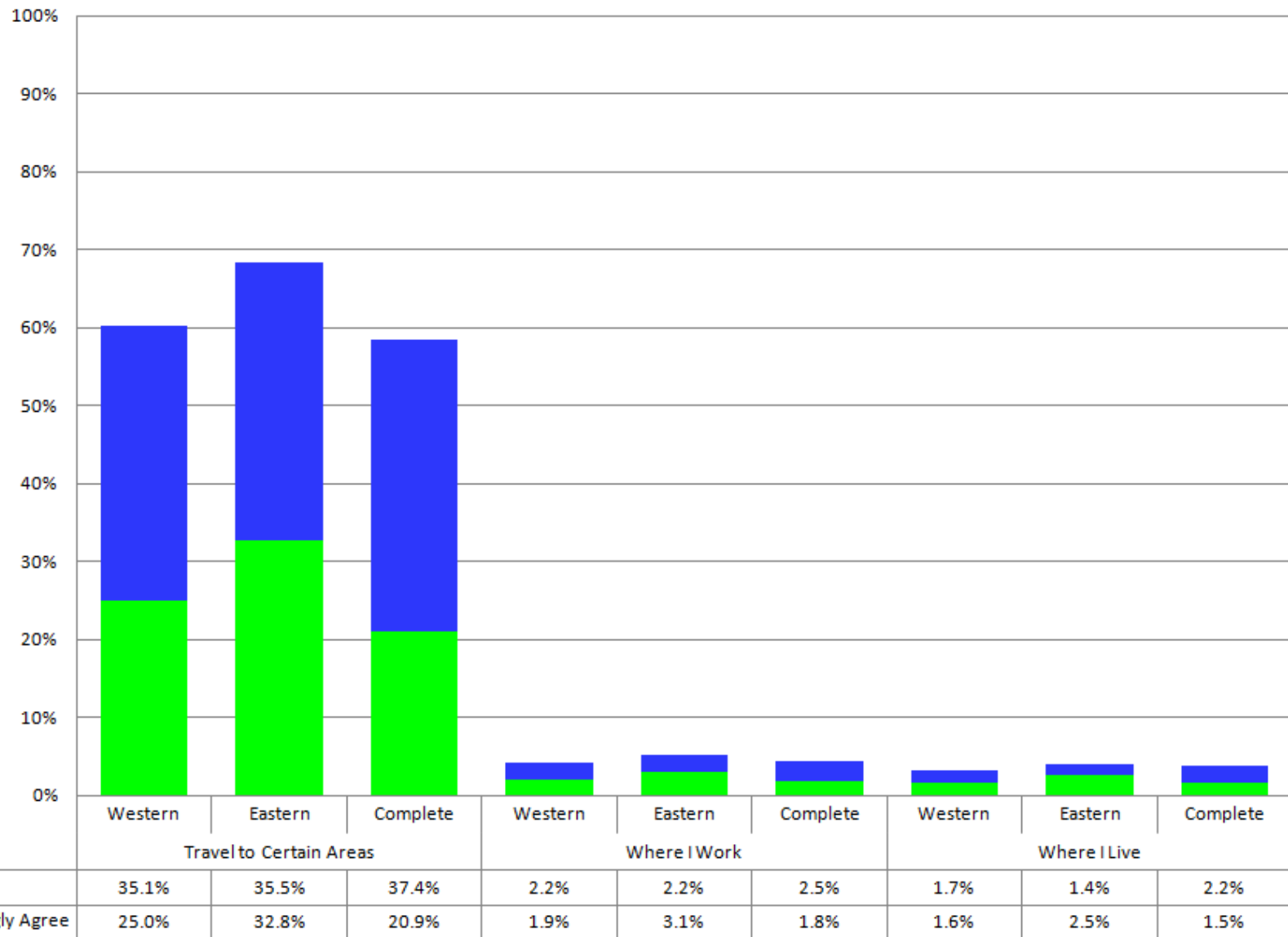
Six of the preceding questions were asked in all three mailed surveys with the key difference being the survey focus. While the final survey looked for changes from the before the initial construction until after the project completion, the other two surveys looked for changes during the Western and Eastern Closures.

The charts on the next two pages show the mostly temporary impact of the two closures as well as the current overall impact of the project. Blue is used for agree and green is used for strongly agree. The *Where I Eat* change question was not asked on the first survey.

Question 1: Change in Overall Behavior, Part I



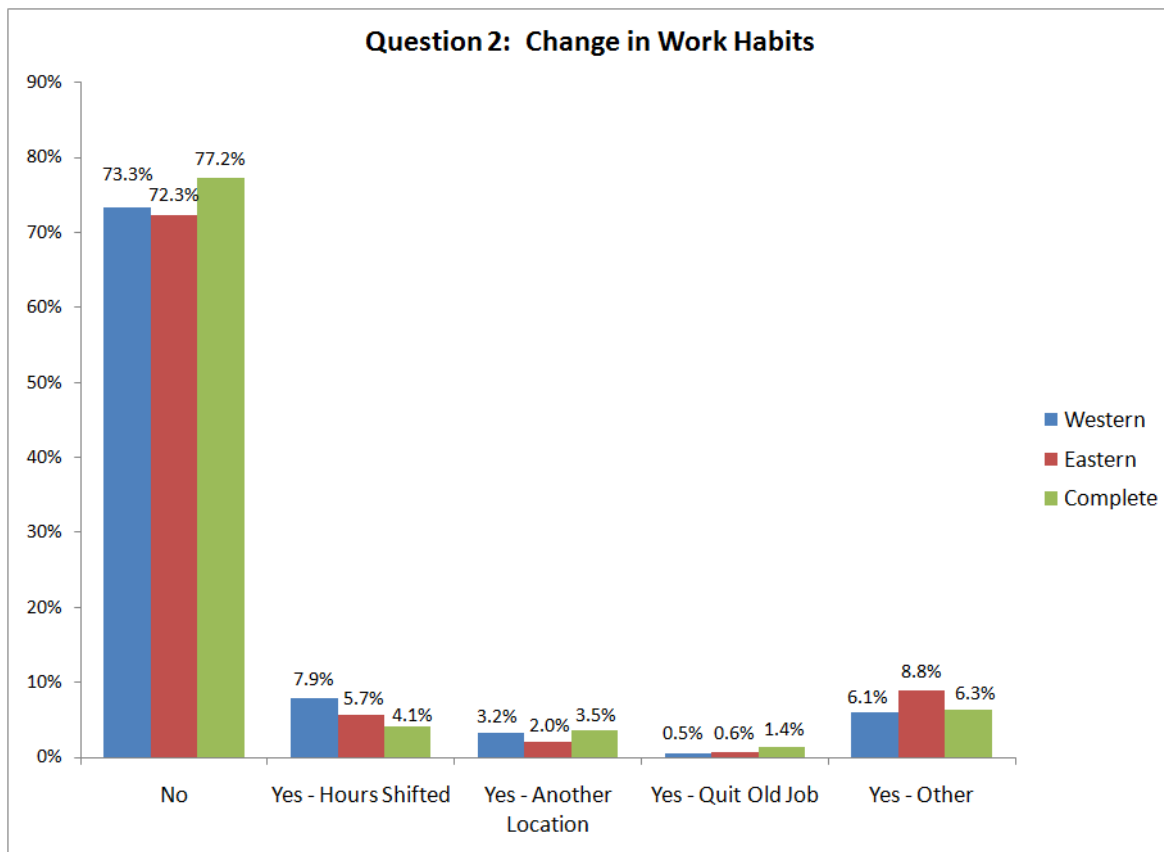
Question 1: Change in Overall Behavior, Part II



Question 2: Change in Work Habits

In question 1, 4.3% of the respondents stated that they had changed where they worked because of the project. More details about this change were provided by the respondents with question 2. Almost all (92.6%) of the respondents answered this question. Most of those who skipped this question probably were retired or otherwise unemployed.

Over three quarters of the respondents stated that the closure did not have a long-term impact on their work habits. In other words, after the project was completed, 77.2% of the respondents still worked the same hours in the same location as they did before the closure. 4.1% of the respondents shifted their work hours. Another 3.5% now work from another location (home, another office, etc.) more often. 1.4% quit their job and now work somewhere else. 6.3% indicated that the closure had an impact on their work habits that was not otherwise captured by the survey. The figure below includes the information for this question from all three surveys.



Question 3: Satisfaction

People are satisfied when their expectations are met or exceeded. Respondents were asked to indicate their level of satisfaction (or dissatisfaction) with eight different measures. In accordance with standard methodology for MoDOT satisfaction measures, only answers that expressed an opinion were counted in the following calculations (in other words, those who skipped the question or indicated that they had no opinion had no impact on the satisfaction calculations).

How well the public has was kept informed about the New I-64 project

Looking back over the entire New I-64 project, virtually all (97.7%) of the respondents were satisfied with how they were kept informed.

	Frequency	Percent
Very Dissatisfied	14	0.9%
Dissatisfied	20	1.3%
Satisfied	643	42.8%
Very Satisfied	824	54.9%
Total	1,501	100.0%

The timeliness of the New I-64 Project information that was made available

Similar to the previous response, 97.6% of the respondents were satisfied with the timeliness of the New I-64 information that was made available throughout the project.

	Frequency	Percent
Very Dissatisfied	12	0.8%
Dissatisfied	24	1.6%
Satisfied	678	46.1%
Very Satisfied	757	51.5%
Total	1,471	100.0%

How alternative travel options were communicated

Approximately ninety percent of the respondents were satisfied with how alternative travel options were communicated. While the mailed survey did not have room to probe for explanations for dissatisfaction, the primary reason for dissatisfaction is probably similar to that discovered in the online survey. Based on the online survey comments, it is likely that most of the 9.7% of respondents who expressed dissatisfaction with this measure were actually dissatisfied with the alternatives themselves, and not how these alternatives were communicated.

	Frequency	Percent
Very Dissatisfied	27	1.9%
Dissatisfied	111	7.8%
Satisfied	810	57.2%
Very Satisfied	468	33.1%
Total	1,416	100.0%

The traffic flow within construction work zones

About three out of four (77.4%) respondents were satisfied with the traffic flow within the New I-64 Project construction work zones.

	Frequency	Percent
Very Dissatisfied	71	5.2%
Dissatisfied	236	17.4%
Satisfied	791	58.2%
Very Satisfied	260	19.1%
Total	1,358	100.0%

How understandable and accurate were the construction work zone signs

Just over ninety percent of the respondents thought the construction work zone signs were understandable and accurate.

	Frequency	Percent
Very Dissatisfied	21	1.5%
Dissatisfied	111	8.1%
Satisfied	902	65.6%
Very Satisfied	341	24.8%
Total	1,375	100.0%

How well you managed to move around the St. Louis area with the New I-64 Project closure

Similar to the response about the traffic flow within the New I-64 Project construction, 76.7% of the respondents were satisfied with how well they could move around the St. Louis area during the closure.

	Frequency	Percent
Very Dissatisfied	88	6.0%
Dissatisfied	256	17.3%
Satisfied	845	57.2%
Very Satisfied	287	19.4%
Total	1,476	100.0%

The decision to complete the work by closing I-64 for 2 years instead of taking 6-8 years with lane closures

About Nineteen out of twenty (95.1%) respondents were satisfied with the decision to close I-64 for two years opposed to take six to eight years to complete the project with lane closures.

	Frequency	Percent
Very Dissatisfied	29	2.0%
Dissatisfied	44	3.0%
Satisfied	493	33.4%
Very Satisfied	909	61.6%
Total	1,475	100.0%

Your overall level of satisfaction with how the New I-64 Project closure was handled

Similar to the satisfaction about the decision to complete the project in two years by closing parts of the interstate, 94.6% of respondents were satisfied with how the I-64 Project close was handled.

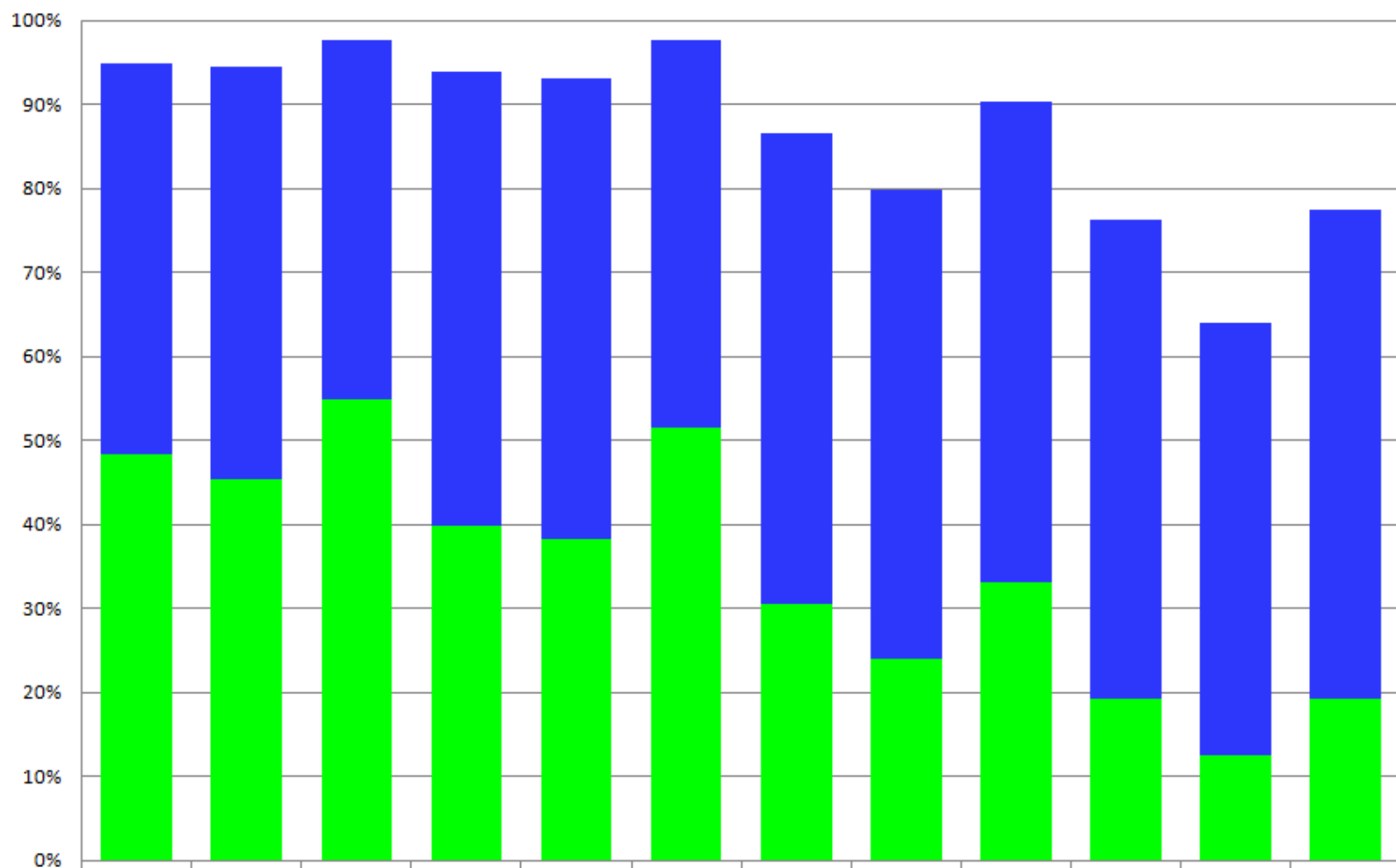
	Frequency	Percent
Very Dissatisfied	28	1.9%
Dissatisfied	53	3.5%
Satisfied	739	49.4%
Very Satisfied	676	45.2%
Total	1,496	100.0%

Project Review: Satisfaction

Similar satisfaction questions were asked in all three mailed surveys with the key difference being the survey focus. While the final survey looked for changes from the before the initial construction until after the project completion, the other two surveys looked for changes during the Western and Eastern Closures.

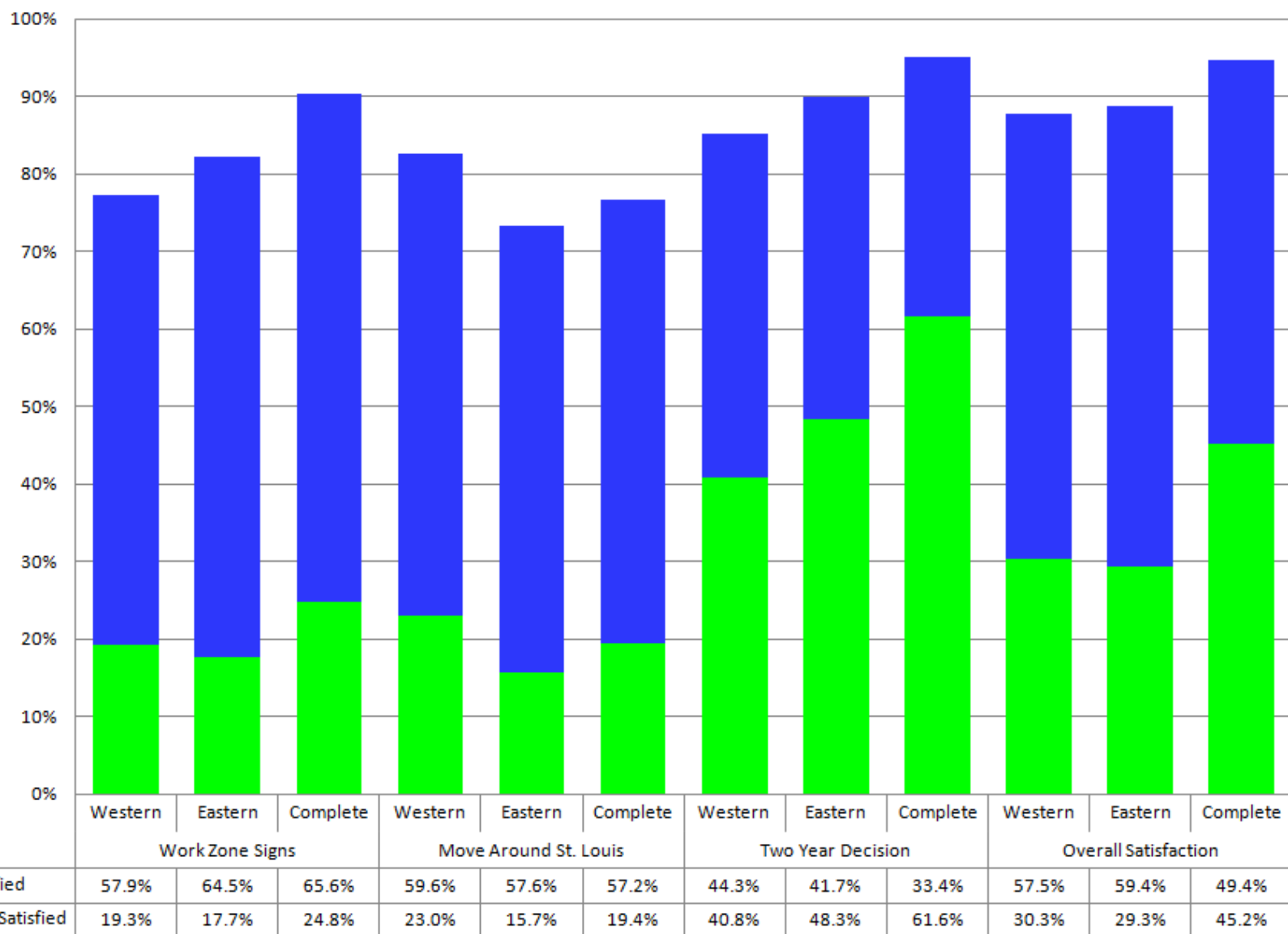
The charts on the next two pages show the mostly temporary impact of the two closures as well as the current overall impact of the project. Blue is used for agree and green is used for strongly agree.

Question 3: Satisfaction, Part I



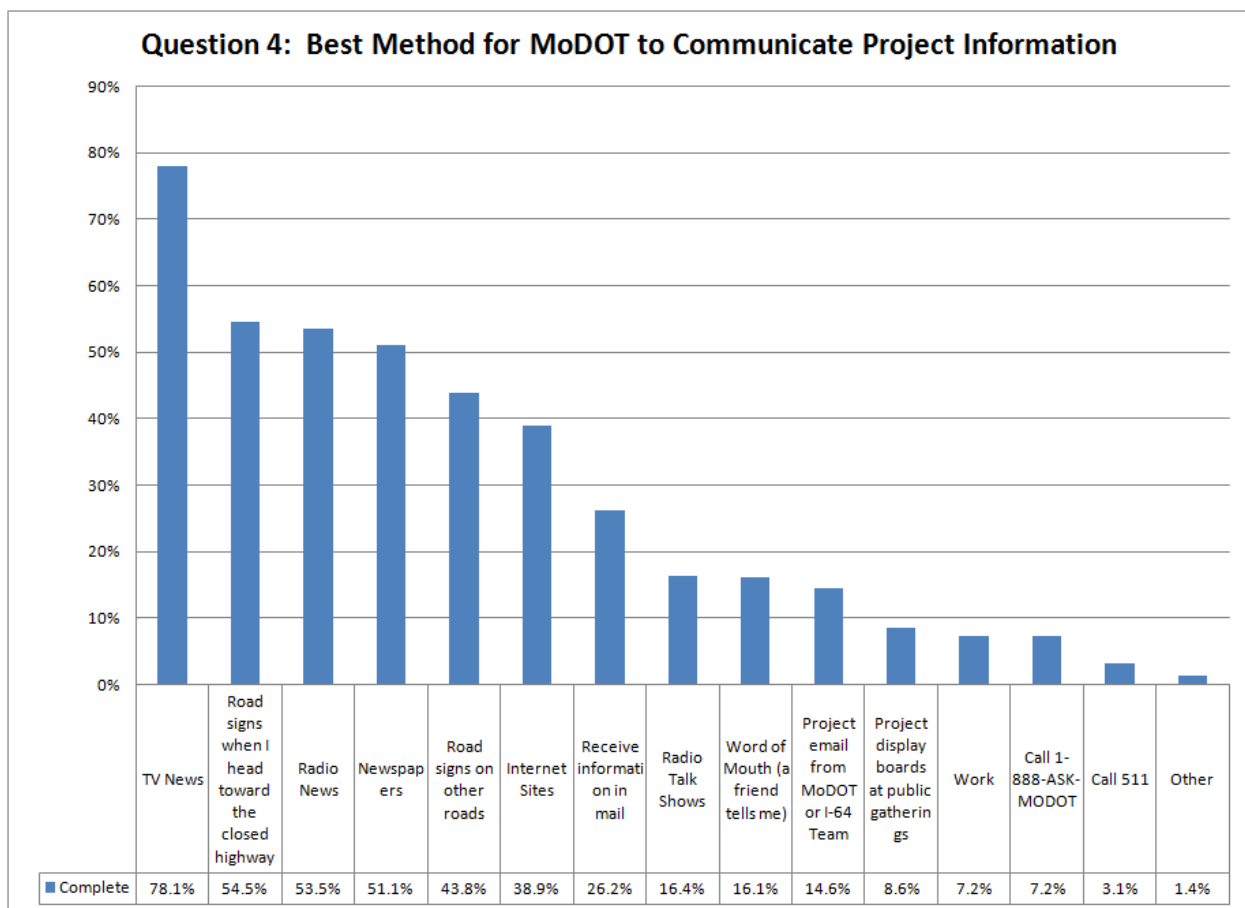
Satisfied	46.5%	49.2%	42.8%	53.9%	54.8%	46.1%	56.1%	55.8%	57.2%	57.1%	51.4%	58.2%
Very Satisfied	48.4%	45.3%	54.9%	39.9%	38.3%	51.5%	30.5%	24.0%	33.1%	19.1%	12.5%	19.1%

Question 3: Satisfaction, Part II



Question 4: Methods for MoDOT to Communicate

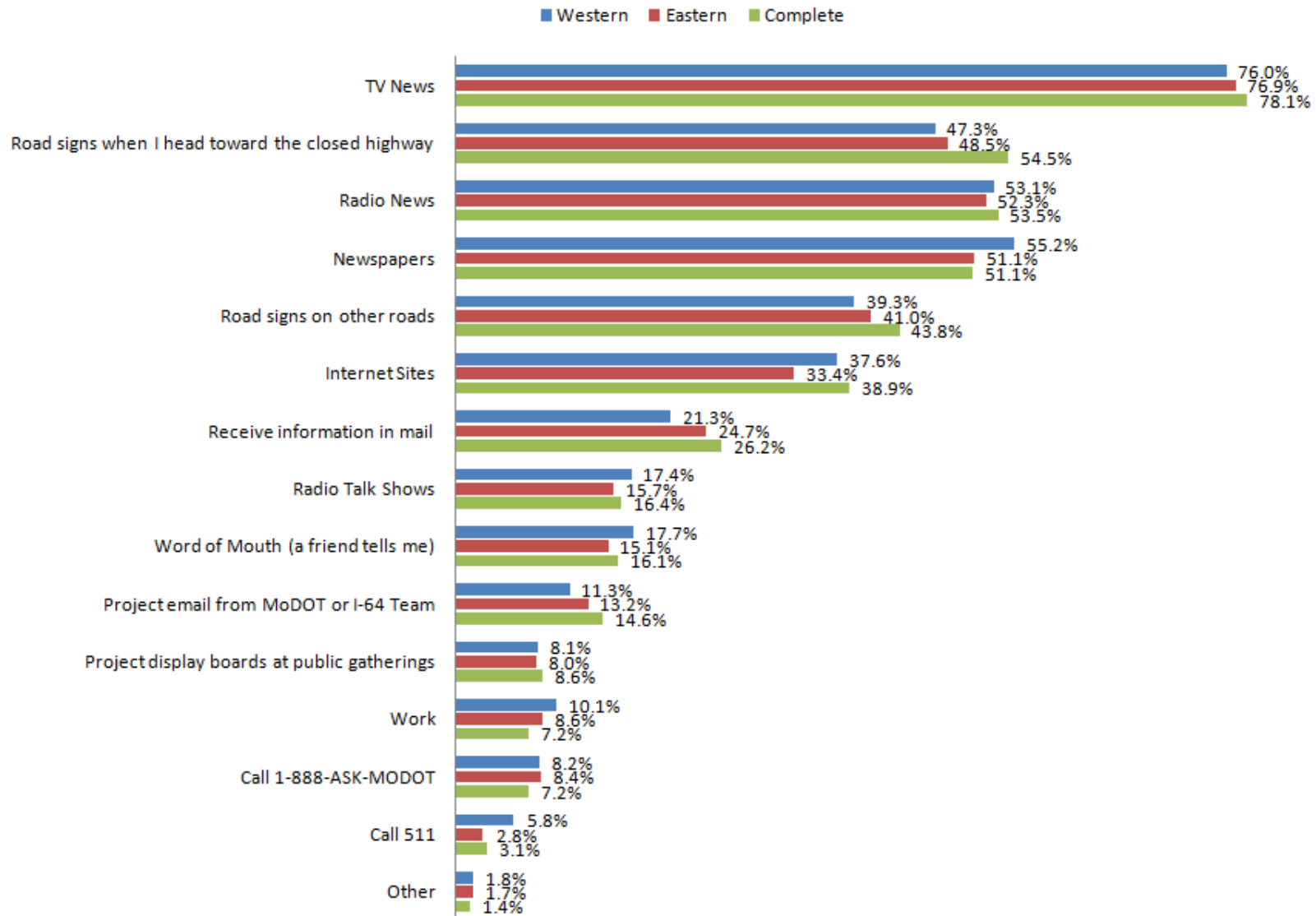
Respondents were asked which ways would be most effective for MoDOT to communicate project information to them. By a large margin, television news was the best method according to 78.1% of respondents. A majority of respondents also suggested road signs near the closed highway (54.5%), radio news (53.5%) and newspapers (51.1%). Only 38.9% of the general public said the internet was an effective way for MoDOT to communicate with them. The following chart summarizes this question.



Project Review: Communication Methods

Similar questions were asked in all three mailed surveys. The results of the latest survey were similar to those of the previous two years. The chart on the next page summarizes the three surveys.

Question 4: Best Method for MoDOT to Communicate Project Information



Questions 5 & 6: Commuting Behavior

Respondents were asked about their driving behavior before and after the New I-64 project. They were specifically asked how often they commuted in various ways in a typical week. Previous surveys captured changes in driving behavior during the construction. The most recent survey was intended to capture any change in behavior that persisted after the project was complete. Overall, the project caused very little change in how people commuted. Where differences exist, they are usually quite small (on the order of 1% or less).

Driving alone

There was almost no shift in commuting behavior among those who usually drive alone. There was a one percent shift from those who drive alone most days to rarely.

Before Closure			After Closure		
Never	137	9.4%	Never	138	9.4%
Rarely	229	15.6%	Rarely	245	16.6%
Most days	1,099	75.0%	Most days	1,090	74.0%
Total	1,465	100.0%	Total	1,473	100.0%

Driving with multiple people

There was virtually no change in the number of people who drive with multiple people.

Before Closure			After Closure		
Never	609	49.0%	Never	613	48.8%
Rarely	424	34.1%	Rarely	429	34.1%
Most days	211	17.0%	Most days	215	17.1%
Total	1,244	100.0%	Total	1,257	100.0%

Riding the bus

While small, there was a noticeable decrease in the number of people who commuted via the bus. In previous surveys, there was an increase in bus ridership during the construction project (part of which also corresponded with very high fuel prices). Based on the previous findings, it appears that the experience of commuting by bus has decreased the number of commuters willing to consider this option if they have an alternative.

Before Closure			After Closure		
Never	1,095	93.4%	Never	1,115	94.8%
Rarely	33	2.8%	Rarely	29	2.5%
Most days	44	3.8%	Most days	32	2.7%
Total	1,172	100.0%	Total	1,176	100.0%

Riding MetroLink (light rail)

Similar to the feedback on bus commuting, there was a small decrease in the number of people commuting via MetroLink.

Before Closure			After Closure		
Never	1,004	85.4%	Never	1,018	86.1%
Rarely	119	10.1%	Rarely	113	9.6%
Most days	53	4.5%	Most days	52	4.4%
Total	1,176	100.0%	Total	1,183	100.0%

Biking

As with the other mass transit options, there was a small, but noticeable decrease in the number of people commuting by bike after the project completion.

Before Closure			After Closure		
Never	1,078	92.6%	Never	1,094	93.2%
Rarely	59	5.1%	Rarely	56	4.8%
Most days	27	2.3%	Most days	24	2.0%
Total	1,164	100.0%	Total	1,174	100.0%

Walking

There was also a small, but noticeable, decrease in the number of people who walked to work after the project completion.

Before Closure			After Closure		
Never	955	80.9%	Never	963	81.6%
Rarely	121	10.2%	Rarely	128	10.8%
Most days	105	8.9%	Most days	89	7.5%
Total	1,181	100.0%	Total	1,180	100.0%

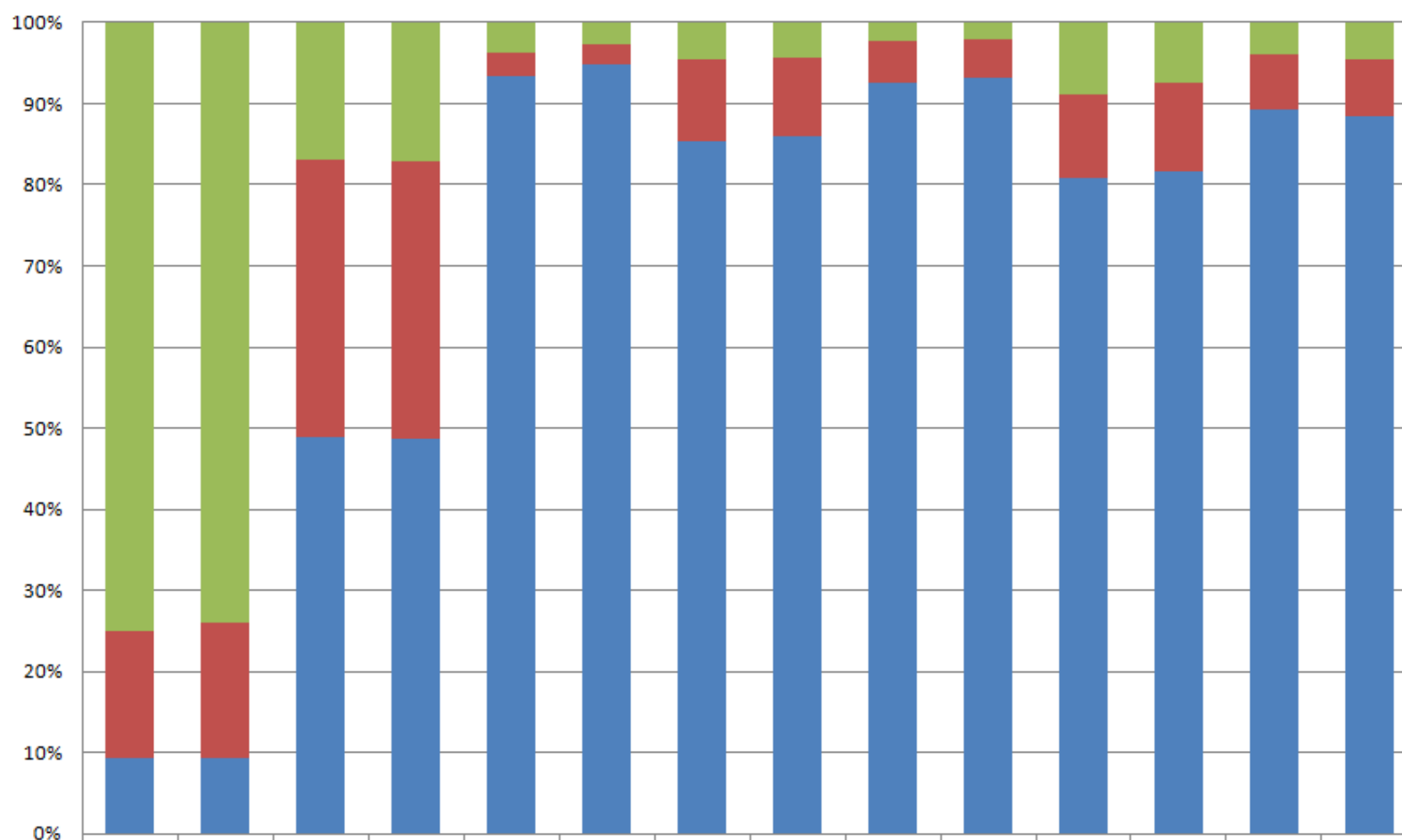
Telecommuting

While there was a slight more away from mass transit among survey respondents, there was an increase (0.5%) among those who frequently telecommuted.

Before Closure			After Closure		
Never	1,044	89.3%	Never	1,036	88.5%
Rarely	78	6.7%	Rarely	82	7.0%
Most days	47	4.0%	Most days	53	4.5%
Total	1,169	100.0%	Total	1,171	100.0%

The chart on the next page summarizes all of the changes in commuting behavior.

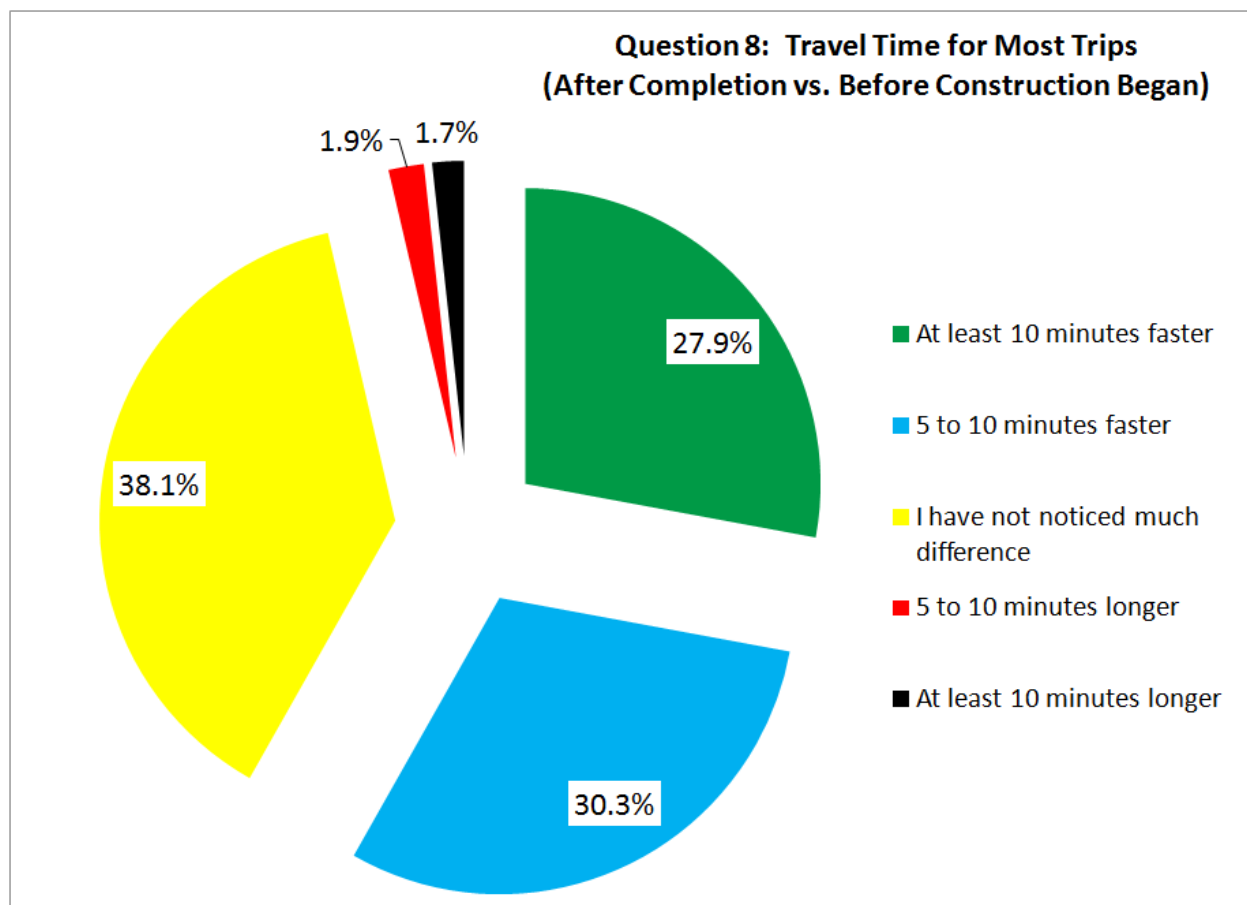
Questions 5 & 6: Driving Behavior - Before and After New I-64 Project



	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After
	Driving Alone		Driving with Others		Bus		Metrolink		Biking		Walking		Telecommuting	
Most Days	75.0%	74.0%	17.0%	17.1%	3.8%	2.7%	4.5%	4.4%	2.3%	2.0%	8.9%	7.5%	4.0%	4.5%
Rarely	15.6%	16.6%	34.1%	34.1%	2.8%	2.5%	10.1%	9.6%	5.1%	4.8%	10.2%	10.8%	6.7%	7.0%
Never	9.4%	9.4%	49.0%	48.8%	93.4%	94.8%	85.4%	86.1%	92.6%	93.2%	80.9%	81.6%	89.3%	88.5%

Question 8: Change in Travel Time

Residents were asked how long most trips in the area took after the project was completed compared to before construction began. 58.2% of respondents noticed a significant improvement (more than five minutes faster) in travel time. Another 38.1% did not notice a significant change. Only 3.7% of respondents stated that the change had resulted in a significant increase (more than five minutes slower) in travel time.

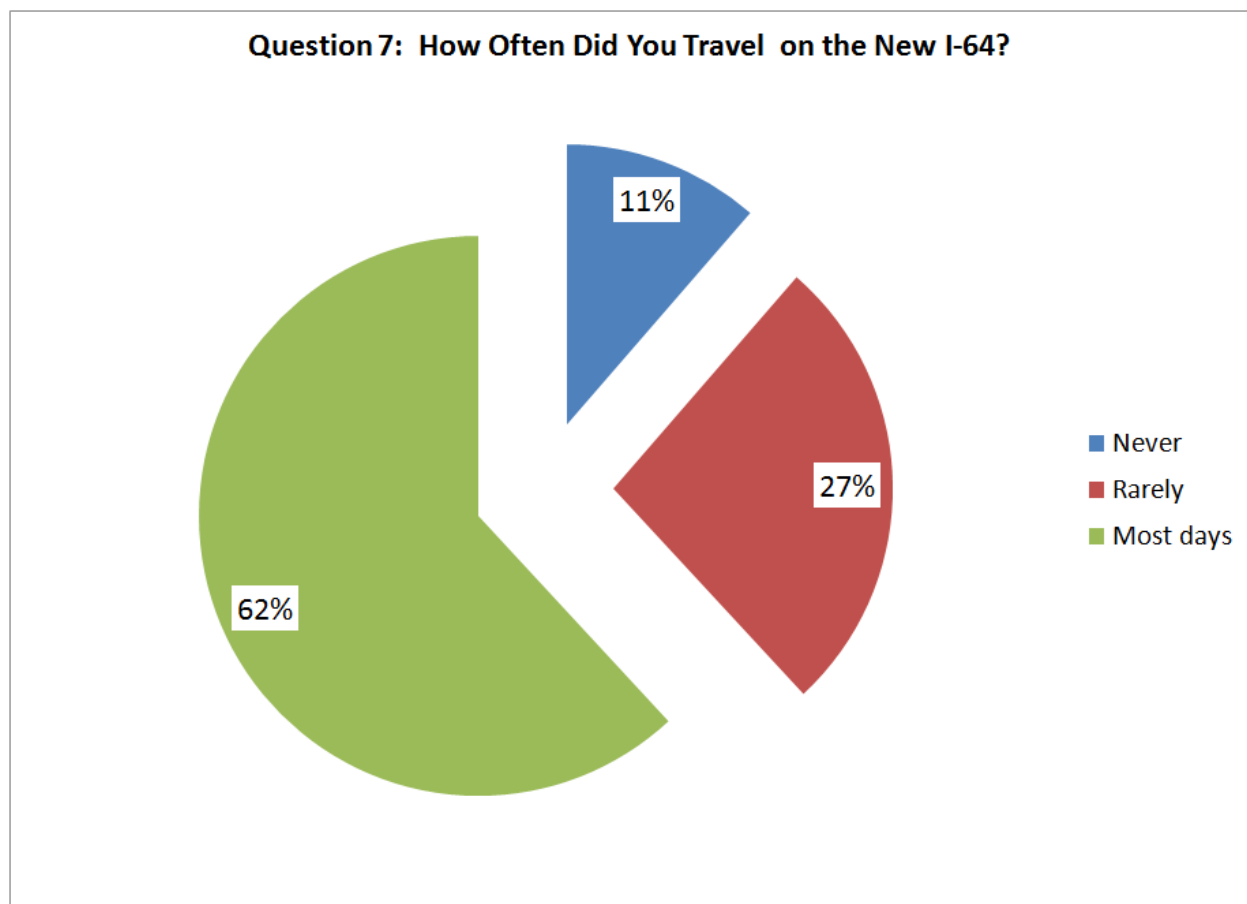


Respondent Demographics (Questions 7, 9 to 11)

Five demographic questions were asked of all respondents. Two related to their driving habits (how often they traveled on the New I-64 and the zip code of their destination). The other three questions (gender, ethnic group, age group) were asked to ensure the study captured people from all groups of people in the area.

Frequency of Travel on New I-64

Respondents were asked how often they traveled on the New I-64 during a typical week after the project was completed. 62% of the respondents frequently drove on this section of the interstate. 27% rarely drove on it and 11% stated they never drove on this section of I-64.



Destination Zip Codes

1,319 respondents completed the destination zip code question. Those who knew the zip code of the place they most frequently drove provided 119 different zip codes. They are listed below in order of greatest frequency.

ZipCode	Frequency	Percent
63105	109	8.3%
63141	71	5.4%
63110	63	4.8%
63103	58	4.4%
63108	57	4.3%
63117	51	3.9%
63119	48	3.6%
63101	46	3.5%
63131	44	3.3%
63130	41	3.1%
63144	40	3.0%
63139	34	2.6%
63109	32	2.4%
63017	31	2.4%
63122	31	2.4%
63143	27	2.0%
63102	26	2.0%
63123	26	2.0%
63124	26	2.0%
63116	23	1.7%
63104	21	1.6%
63118	20	1.5%
63112	19	1.4%
63125	19	1.4%
63136	16	1.2%
63106	15	1.1%
63146	15	1.1%
63107	13	1.0%
63115	13	1.0%
63132	13	1.0%
63121	12	0.9%
63011	10	0.8%
63113	10	0.8%
63137	10	0.8%

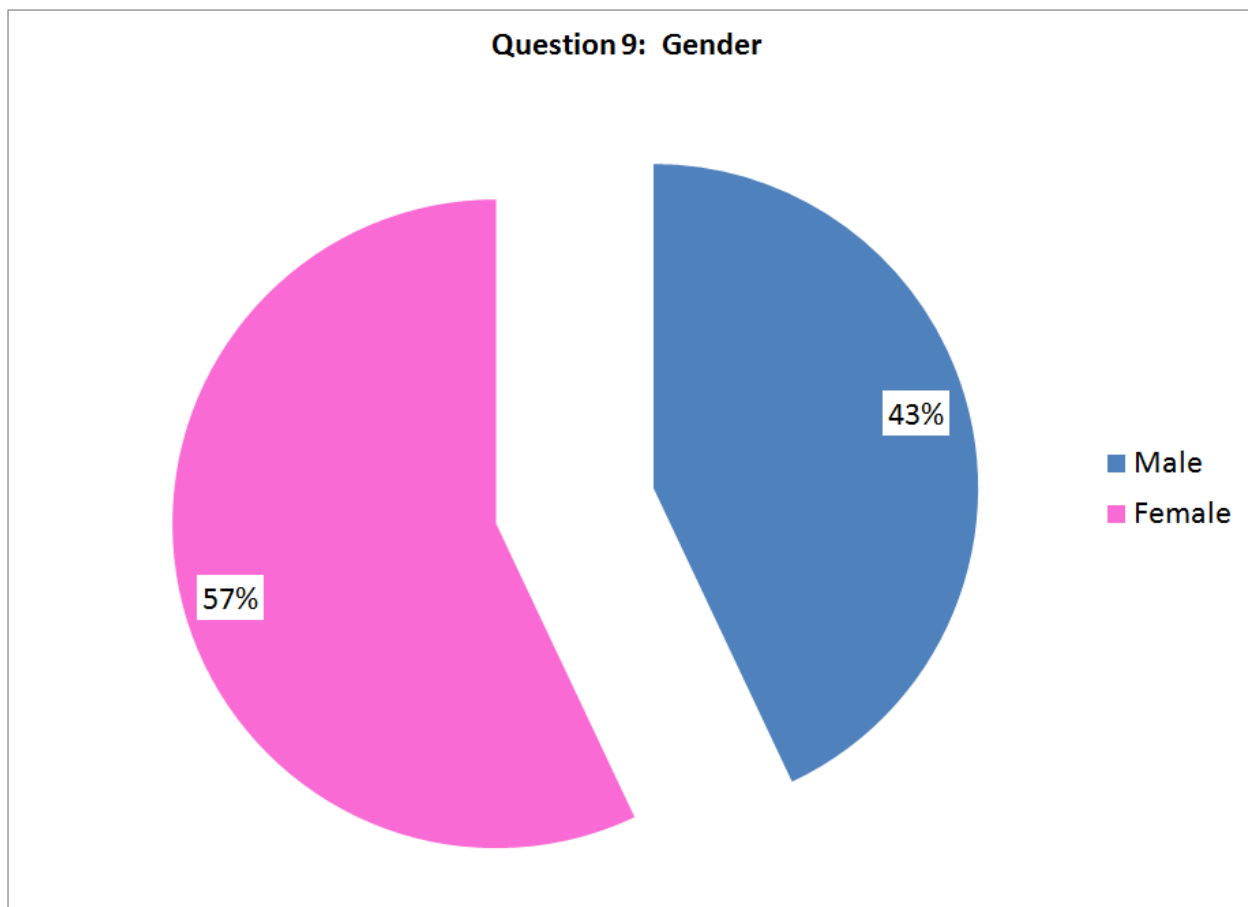
ZipCode	Frequency	Percent
63005	9	0.7%
63043	9	0.7%
63044	9	0.7%
63111	9	0.7%
63120	8	0.6%
63133	8	0.6%
63147	8	0.6%
63128	7	0.5%
63010	6	0.5%
63026	6	0.5%
63135	6	0.5%
63301	6	0.5%
63366	6	0.5%
62105	5	0.4%
62141	5	0.4%
63033	5	0.4%
63042	5	0.4%
63045	5	0.4%
63114	5	0.4%
63134	5	0.4%
63021	4	0.3%
63074	4	0.3%
63164	4	0.3%
63368	4	0.3%
62108	3	0.2%
63031	3	0.2%
63127	3	0.2%
63129	3	0.2%
63303	3	0.2%
63304	3	0.2%
62104	2	0.2%
62117	2	0.2%
62119	2	0.2%
62143	2	0.2%
62208	2	0.2%
62220	2	0.2%
63138	2	0.2%
63145	2	0.2%
62002	1	0.1%
62017	1	0.1%

ZipCode	Frequency	Percent
62023	1	0.1%
62031	1	0.1%
62033	1	0.1%
62034	1	0.1%
62040	1	0.1%
62044	1	0.1%
62101	1	0.1%
62102	1	0.1%
62109	1	0.1%
62111	1	0.1%
62120	1	0.1%
62122	1	0.1%
62123	1	0.1%
62124	1	0.1%
62144	1	0.1%
62146	1	0.1%
62201	1	0.1%
62206	1	0.1%
62225	1	0.1%
62226	1	0.1%
62230	1	0.1%
62234	1	0.1%
62277	1	0.1%
63000	1	0.1%
63002	1	0.1%
63004	1	0.1%
63024	1	0.1%
63030	1	0.1%
63039	1	0.1%
63049	1	0.1%
63069	1	0.1%
63081	1	0.1%
63099	1	0.1%
63126	1	0.1%
63151	1	0.1%
63155	1	0.1%
63167	1	0.1%
63177	1	0.1%
63205	1	0.1%
63376	1	0.1%

ZipCode	Frequency	Percent
63385	1	0.1%
63611	1	0.1%
64017	1	0.1%
66666	1	0.1%
69696	1	0.1%

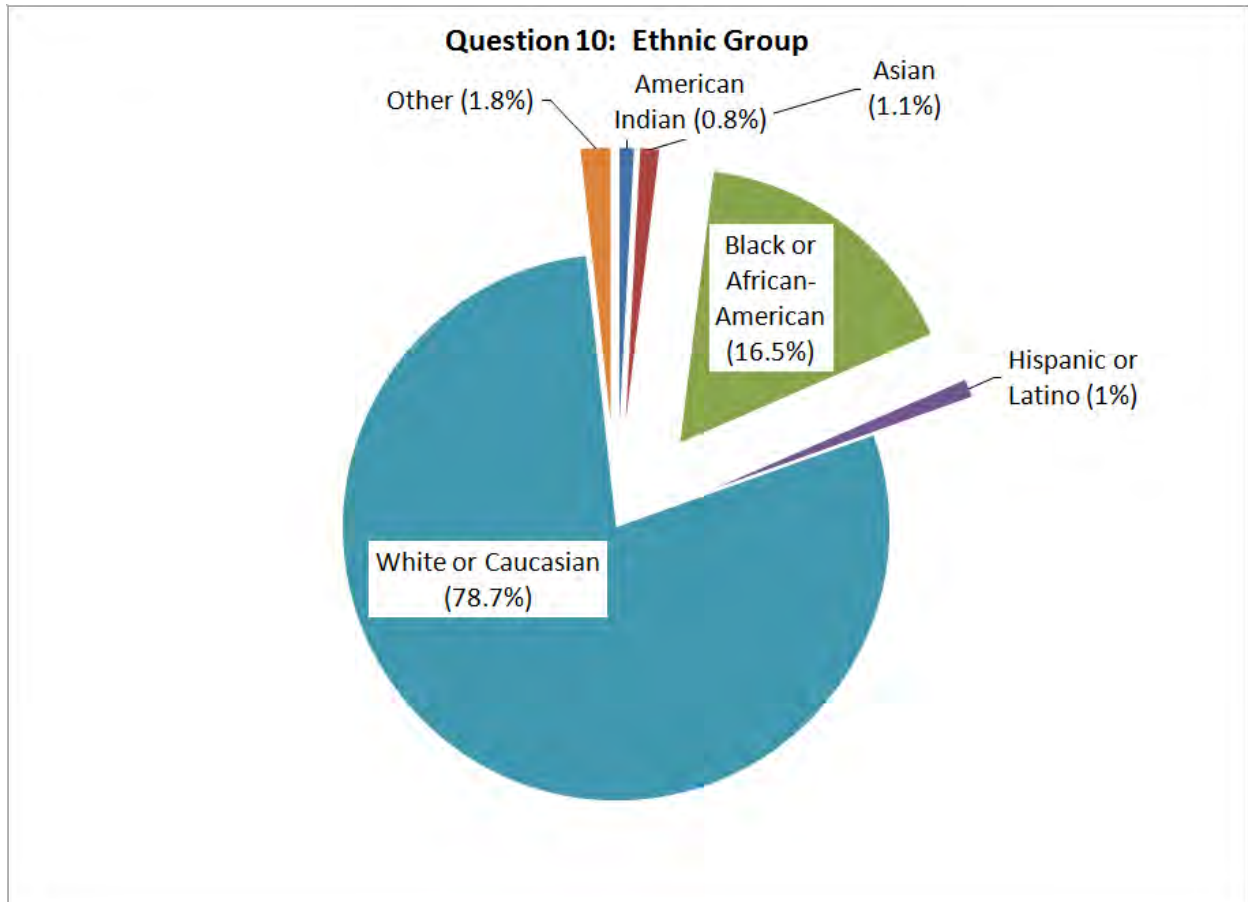
Gender

Both genders were well represented in the research, with a majority (57.0%) being female.



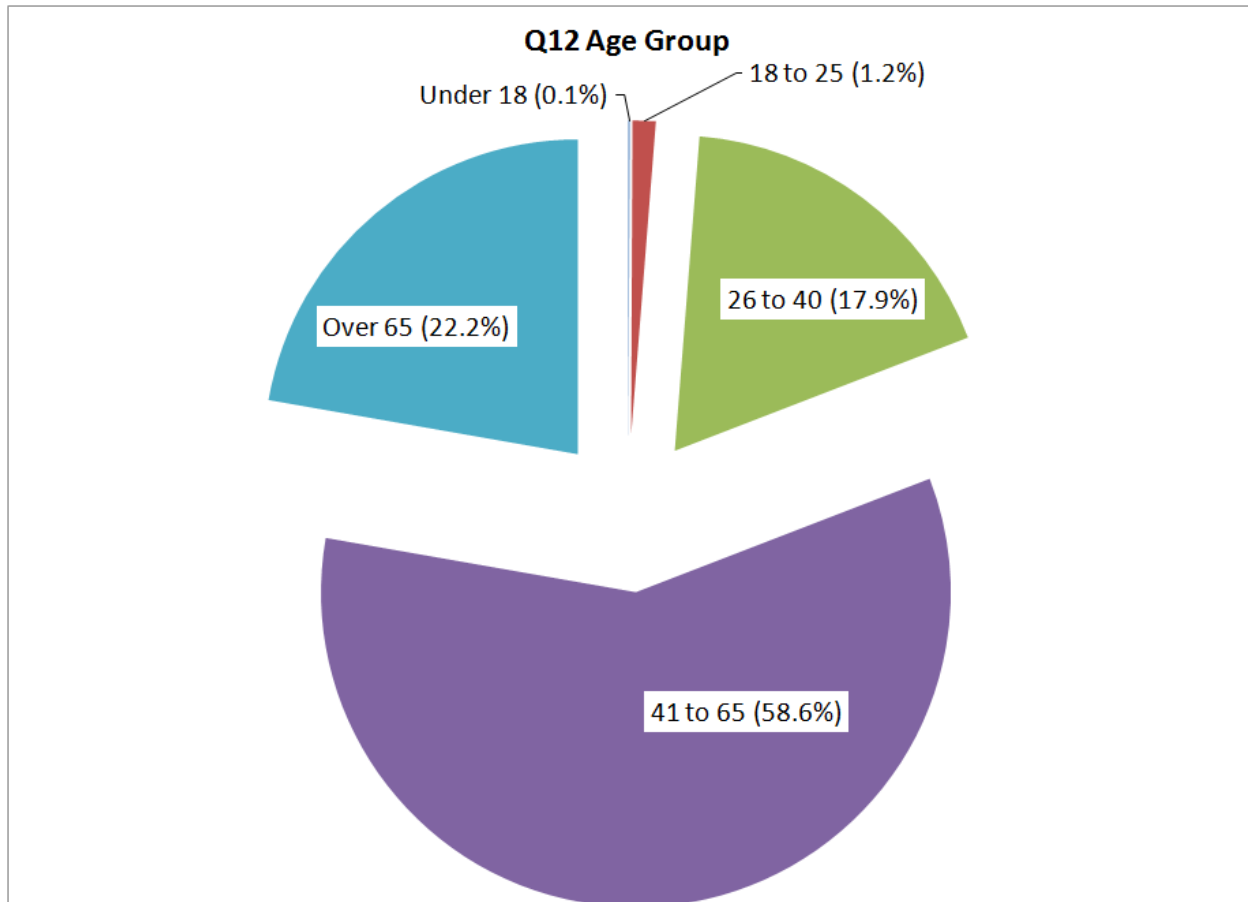
Ethnicity

One of the goals of this study was to ensure ample minority participation. This was achieved, 21.3% of the responses came from an ethnic minority.



Age Group

Drivers of all ages were surveyed. The majority (58.6%) of respondents were between 41 and 65 years of age.



Appendix A: Copy of Survey

Dear Resident,

Please help us. Heartland Market Research LLC has been hired by MoDOT to survey the general public about your opinions regarding the New I-64 Project. Now that the project is complete, this survey is designed to provide citizen feedback to MoDOT about how this project was conducted and how it may have affected you.

Our only interest in this project is to provide accurate information about what you think, so please respond as accurately and completely as possible. The survey should take less than 5 minutes to complete, and you can return the survey to us in the enclosed postage paid envelope. If you have any questions about the survey, please call me directly at (800) 709-1721. If you have any questions about the New I-64 Project you may call MoDOT at (888) ASK-MODOT or visit www.thenewi64.org.

Thank you,



Lance Gentry

Principal Investigator, Heartland Market Research LLC



HEARTLAND
MARKET RESEARCH LLC

MARKING INSTRUCTIONS

- Use pencil or a blue or black ink pen.
- Make no stray marks on this form.
- Completely fill in the appropriate ovals.

CORRECT: ● INCORRECT: ✗ ○ ●

Customer Survey about the New I-64 Project

1. Please indicate your agreement (or disagreement) with the following statements about how your behavior may have changed from before the project's closure (so before January 2, 2008) and after it was reopened (so after December 7, 2009).

	strongly agree	agree	disagree	strongly disagree	no opinion
the closure has changed where I shop	++	+	-	--	?
the closure has changed where I buy gas	++	+	-	--	?
the closure has changed where I bank	++	+	-	--	?
the closure has changed where I eat out	++	+	-	--	?
the closure has changed how often I travel to certain areas	++	+	-	--	?
the closure has changed where I work	++	+	-	--	?
the closure has changed where I live	++	+	-	--	?

2. Has the New I-64 project changed your work habits? (Mark all that apply)

- ☐ No - I still work the same hours in the same location as I did before the project
- ☐ Yes - My hours have shifted
- ☐ Yes - I now work from another location (home, another office, etc.) more often
- ☐ Yes - I quit my job and accepted one somewhere else
- ☐ Yes - Other

3. Considering the entire New I-64 project, please indicate your level of satisfaction with:

	very satisfied	satisfied	dissatisfied	very dissatisfied	no opinion
How well the public was kept informed about the New I-64 Project?	++	+	-	--	?
The timeliness of the New I-64 Project information that was made available?	++	+	-	--	?
How alternative travel options were communicated?	++	+	-	--	?
The traffic flow within the construction work zones?	++	+	-	--	?
How understandable and accurate were the construction work zone signs?	++	+	-	--	?
How well you managed to move around the St. Louis area with the New I-64 Project closure?	++	+	-	--	?
The decision to complete the work by closing I-64 for 2 years instead of taking 6 to 8 years with lane closures?	++	+	-	--	?
Your overall level of satisfaction with how the New I-64 Project closure was handled?	++	+	-	--	?

Please complete both sides of the survey.

4. What are the best ways for MoDOT to get information to you about road improvements and other road and bridge information? (Mark all that apply to you)

- | | | |
|---|---|--|
| <input type="checkbox"/> TV News | <input type="checkbox"/> Receive information in mail (newsletter, etc.) | <input type="checkbox"/> Word of Mouth (a friend tells me) |
| <input type="checkbox"/> Radio News | <input type="checkbox"/> Project email from MoDOT or I-64 Team | <input type="checkbox"/> Work |
| <input type="checkbox"/> Radio Talk Shows | <input type="checkbox"/> Project display boards at public gatherings | <input type="checkbox"/> Call 1-888-ASK-MODOT |
| <input type="checkbox"/> Newspapers | <input type="checkbox"/> Road signs on other roads | <input type="checkbox"/> Call 511 |
| <input type="checkbox"/> Internet sites | <input type="checkbox"/> Road signs when I head toward the closed highway | <input type="checkbox"/> Other |

5. In a typical week before the New I-64 Project closure (before January 2, 2008), how often did you commute in the following ways? (Count round trips twice)

	never	1 to 2 times per week	3 to 4 times per week	most weekdays	almost every day
Driving alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Driving with multiple people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Riding the bus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Riding MetroLink (light rail)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Biking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telecommuting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. In a typical week after the New I-64 Project was reopened (after December 7, 2009), how often do you commute in the following ways? (Count round trips twice)

	never	1 to 2 times per week	3 to 4 times per week	most weekdays	almost every day
Driving alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Driving with multiple people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Riding the bus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Riding MetroLink (light rail)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Biking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telecommuting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. In a typical week after the New I-64 Project was reopened (after December 7, 2009), how often did you travel on the closed section of I-64 (Highway 40) between I-170 and Kingshighway Boulevard? Please count round trips twice.

- ☐ Never
- ☐ Very rarely
- ☐ Once a week
- ☐ Two to three times a week
- ☐ Most weekdays
- ☐ Almost every day

8. Please indicate how long it takes you to make most trips now compared to how long it took you before the closure started (compared to before January 2, 2008).

- ☐ At least 10 minutes faster
- ☐ 5 to 10 minutes faster
- ☐ I have not noticed much difference
- ☐ 5 to 10 minutes longer
- ☐ At least 10 minutes longer

The following questions are asked because we need to make sure we are not missing any groups of people from our survey. Feel free to skip any questions that make you uncomfortable.

Demographic Questions

9. Are you male or female? ☒ Male ☐ Female

10. To which ethnic group(s) do you belong? (Mark all that apply)

- ☐ American Indian
- ☐ Asian
- ☐ Black or African American
- ☐ Hispanic or Latino
- ☐ White or Caucasian
- ☐ Other

11. Fill in the zip code of where you most frequently drive other than where you live. For most people this will be your work zip code.

9	8	7	6	5	4
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

12. How old are you?

- ☐ Under 18
- ☐ 18 to 25
- ☐ 26 to 40
- ☐ 41 to 65
- ☐ Over 65

PLEASE DO NOT WRITE IN THIS AREA

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Appendix B

**I-64 Full Closure Project
Crash Evaluation
2009 Annual Report
Appendix B**

**Missouri S&T
HDR**

**Dr. Hojong Baik
Daxiao Liu
Tom Ryan**

November 24, 2010

Executive Summary

On January 2, 2008, the Missouri Department of Transportation (MoDOT) closed I-64 for reconstruction. During the planning stages of this reconstruction project, the plan to close all lanes of roadways was met with concern, inciting questions from the general public like: *Could closing the roadway possibly contribute to more (or less) crashes than before on adjacent roadways? And, if noticeable changes existed in the number and types of crashes, are the changes due to closing I-64 or other influencing factors?*

This 2009 Annual Report and its companion 2008 Annual Report aims to answer these questions by examining crash data before and during the closure, and by providing objective explanations to the changes if any. This study retained the same analysis approach conducted in 2008 by conducting two separate analyses (Crash Analysis and Crash Rate Analysis). The following presents the main findings from the two analyses with the inclusion of 2009 crash information:

Crash Analysis:

The research team was provided a 6-year (2004-2009) crash data, which included all the crashes that occurred on the 17 roadways (including parts I-64 that remained opened) in the vicinity of the closure. Using this data set, 2 years closure period crashes (2008 and 2009) are compared to 4 years pre-closure crashes (2004 through 2007). Figures 1 through 3 show the trend in total crashes for roadways that could have been impacted by the I-64 construction project.

General Findings

Comparisons were based on average for the 4-year pre-closure versus 2-year closure crash data

Freeways:

- 2008 - Increase in crashes for I-44 (4.5 percent), I-55 (3.6 percent) and I-70 (8.1 percent)
- 2008 - Decrease in crashes for I-64 (51.7 percent), I-170 (6.3 percent) and I-270 (6.3 percent)
- 2009 – Increase in crashes only for I-70 (15.7 percent)
- 2009 – Decrease in crashes for I-44 (18.8 percent), I-55 (7.6 percent), I-64 (72.5 percent), I-170 (32.6 percent) and I-270 (18.8 percent)

Expressways:

- 2008 - Increase in crashes only for Route D (2.1 percent)
- 2008 - Decrease in crashes for US 40 (34.7 percent), US 61 (7.5 percent), US 67 (15.6 percent) and Route 141 (7 percent)
- 2009 – Increase in crashes only for Route 141 (15.5 percent)
- 2009 – Decrease in crashes for US 40 (11 percent), US 61 (5.1 percent), US 67 (4.2 percent) and Route D (32.2 percent)

Major Arterials:

- 2008 - Increase in crashes only for Route 100 (4.9 percent)
- 2008 - Decrease in crashes for Routes 30 (19.8 percent), 115 (6.1 percent), 180 (13.2 percent), 340 (2.9 percent) and 366 (14.9 percent)
- 2009 – Increase in crashes for Routes 100 (9.5 percent) and 115 (0.1 percent)
- 2009 – Decrease in crashes for Routes 30 (12.6 percent), 180 (19 percent), 340 (14.9 percent) and 366 (5.2 percent)

Figure 1 – All Crashes for Freeway Roadways

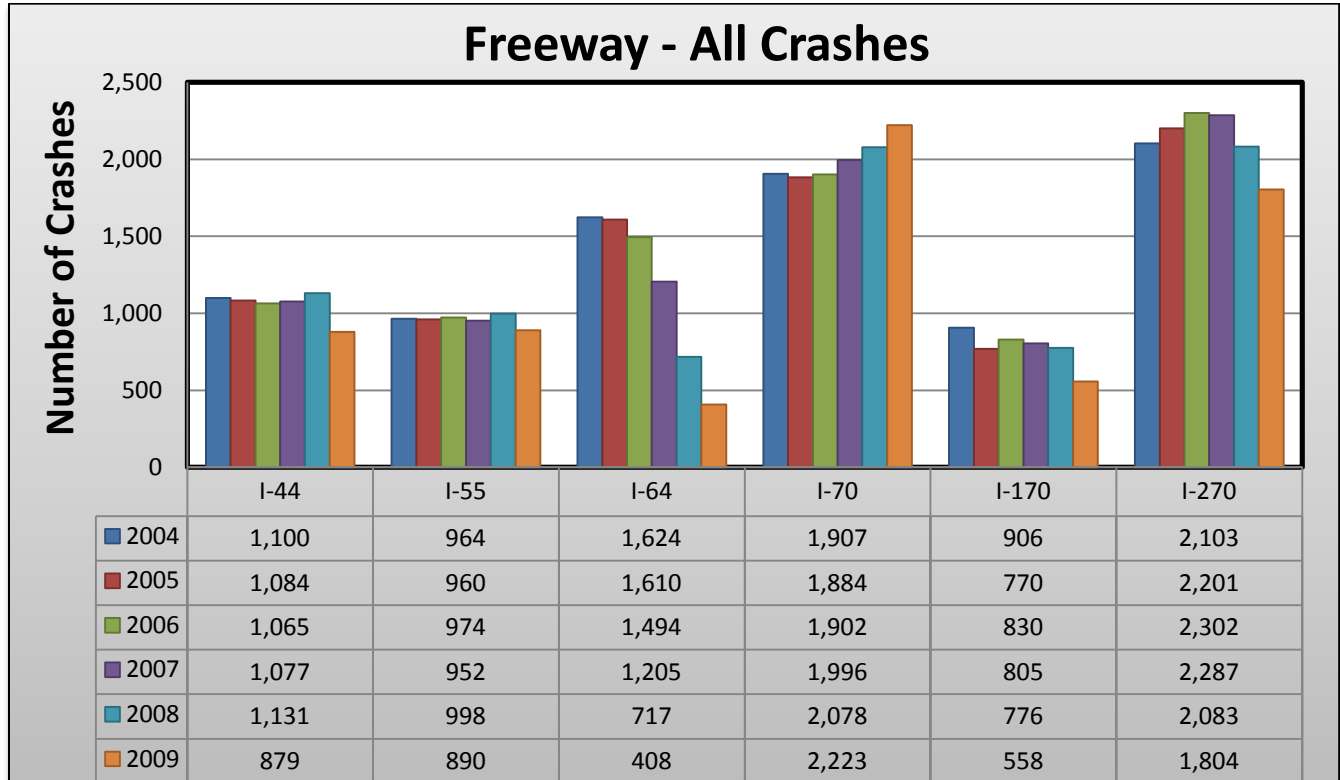


Figure 2 – All Crashes for Expressway Roadways

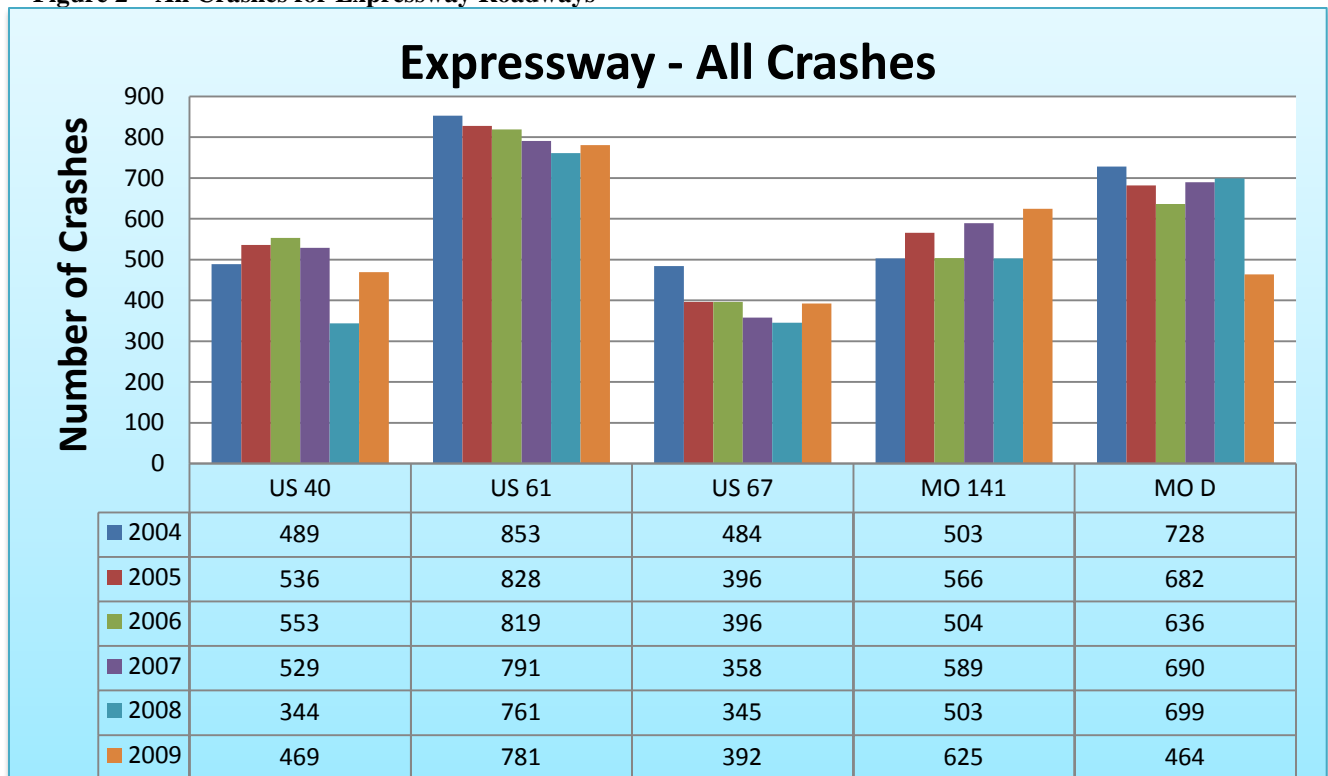
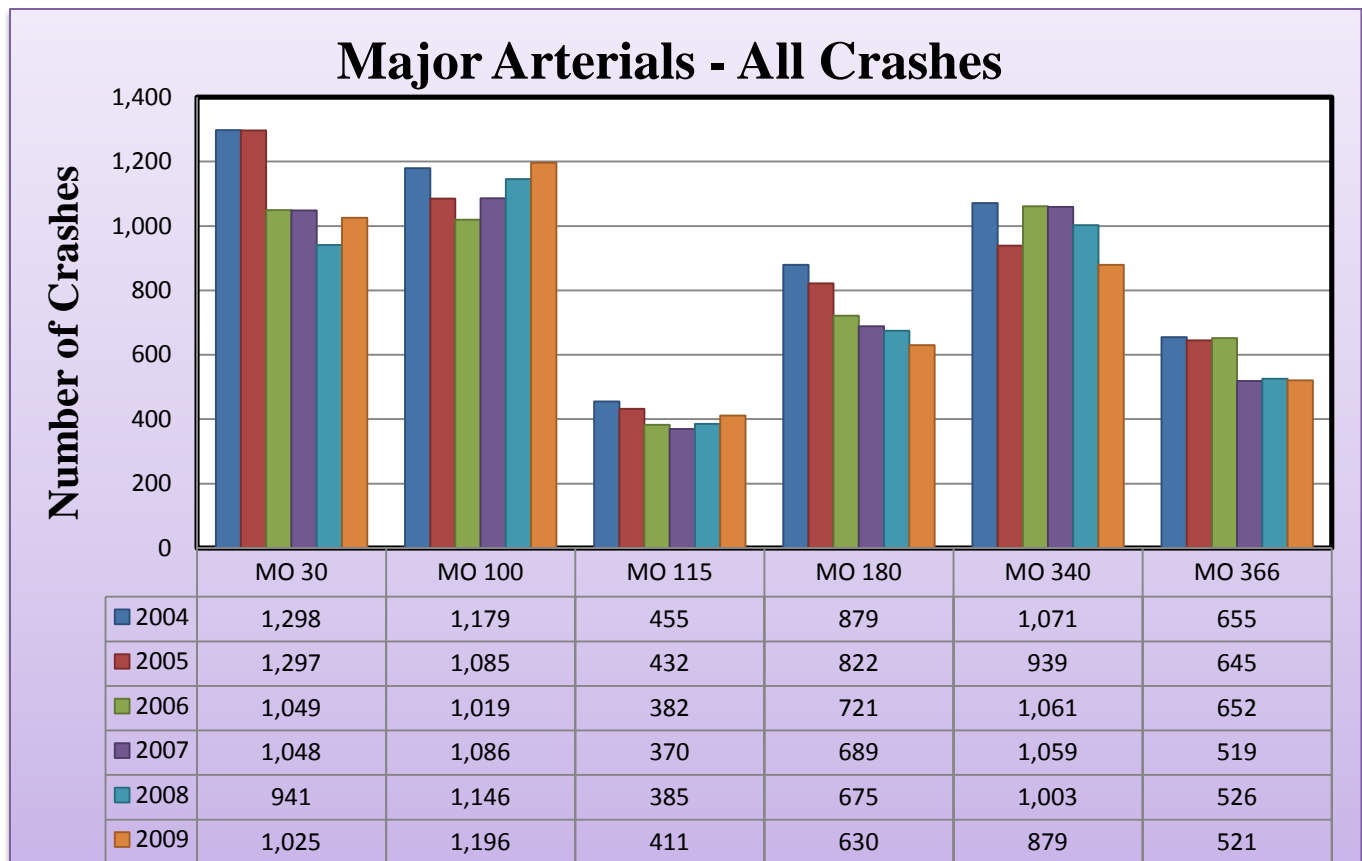


Figure 3 All Crashes for Major Arterial Roadways



Crash Rate Analysis:

The crash rate represents the exposure to crashes relative to total vehicle miles traveled. For example, if roadway A shows a higher crash rate than roadway B, it indicates that roadway A is more vulnerable to crashes than roadway B. Traffic volumes, roadway lengths and number of days are used in calculating crash rates, thus standardizing the comparison between roadways. Figures 4 through 6 present the crash rates for roadways investigated and the major findings from the crash rate analysis are as follow:

General Findings

Comparisons were based on average for the 4-year pre-closure versus 2-year closure crash rate data

Freeways:

- 2008 - Increase in crash rates for I-70 (8.6 percent) and I-55 (0 percent)
- 2008 - Decrease in crash rates for I-44 (0.7 percent), I-64 (50.5 percent), I-170 (6.9 percent) and I-270 (6.7 percent)
- 2009 – Increase in crash rates only for I-70 (12.3 percent)
- 2009 – Decrease in crash rates for I-44 (25.4 percent), I-55 (5.3 percent), I-64 (72.3 percent), I-170 (31.2 percent) and I-270 (20.9 percent)

Expressways:

- 2008 - Increase in crash rates only for Route D (2.1 percent)
- 2008 - Decrease in crash rates for US 40 (34.7 percent), US 61 (7.5 percent), US 67 (15.6 percent) and Route 141 (7 percent)
- 2009 – Increase in crash rates only for Route 141 (15.5 percent)
- 2009 – Decrease in crash rates for US 40 (11 percent), US 61 (5.1 percent), US 67 (4.2 percent) and Route D (32.2 percent)

Major Arterials:

- 2008 - Increase in crash rates only for Route 100 (4.9 percent)
- 2008 - Decrease in crash rates for Routes 30 (19.8 percent), 115 (6.1 percent), 180 (13.2 percent), 340 (2.9 percent) and 366 (14.9 percent)
- 2009 – Increase in crash rates for Routes 100 (9.5 percent) and 115 (0.1 percent)
- 2009 – Decrease in crash rates for Routes 30 (12.6 percent), 180 (19 percent), 340 (14.9 percent) and 366 (5.2 percent)

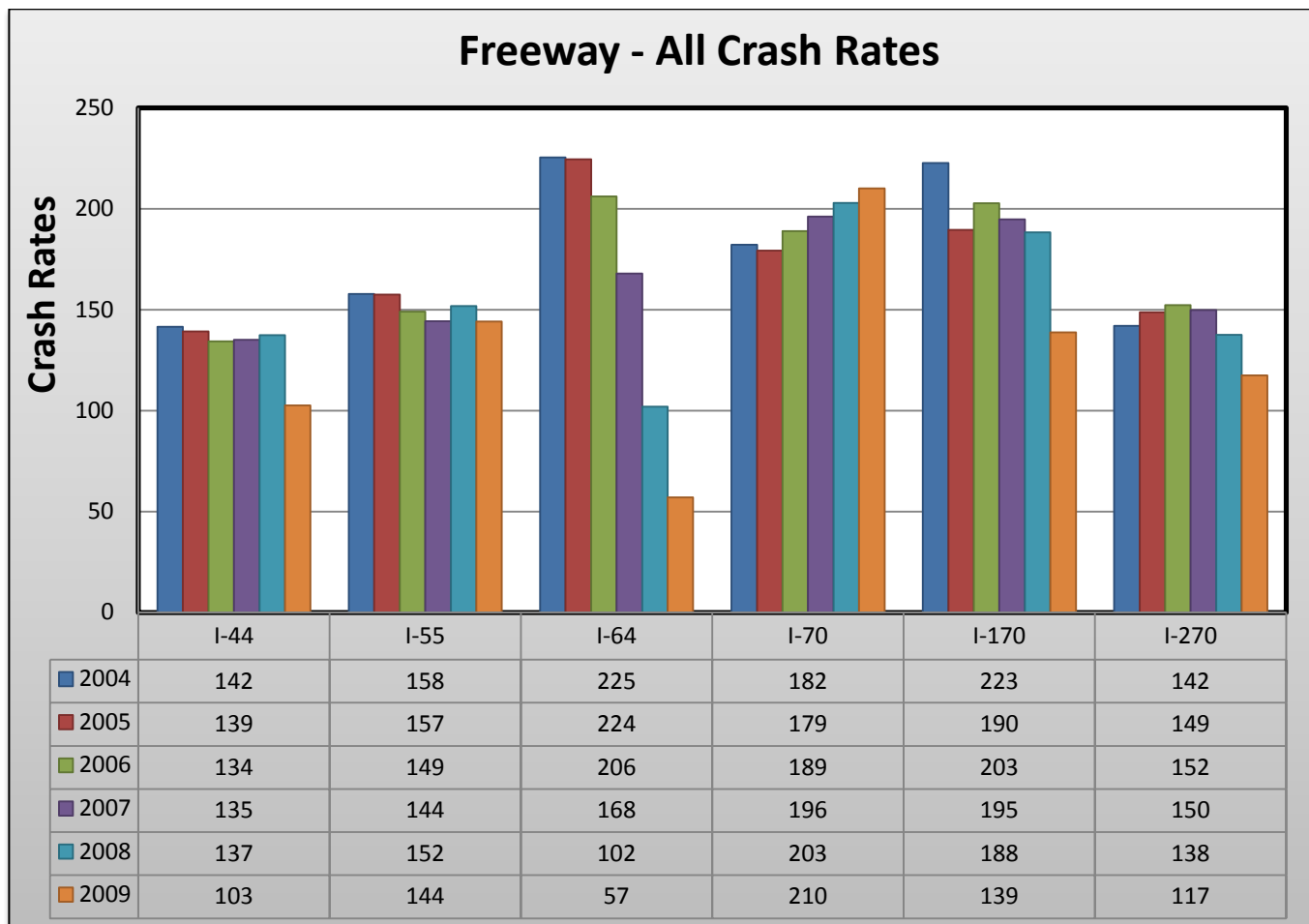
Figure 4 - All Crash Rates for Freeway Roadways

Figure 5 – All Crash Rates for Expressway Roadways

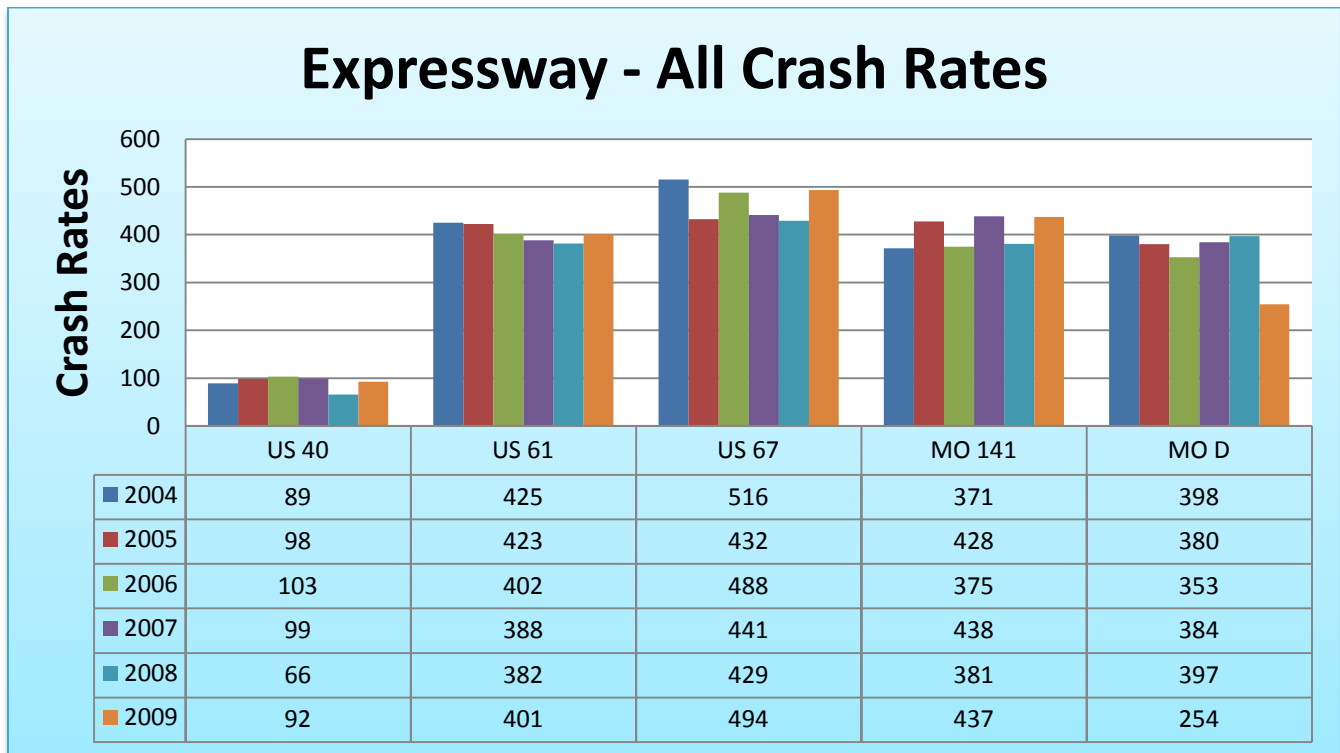
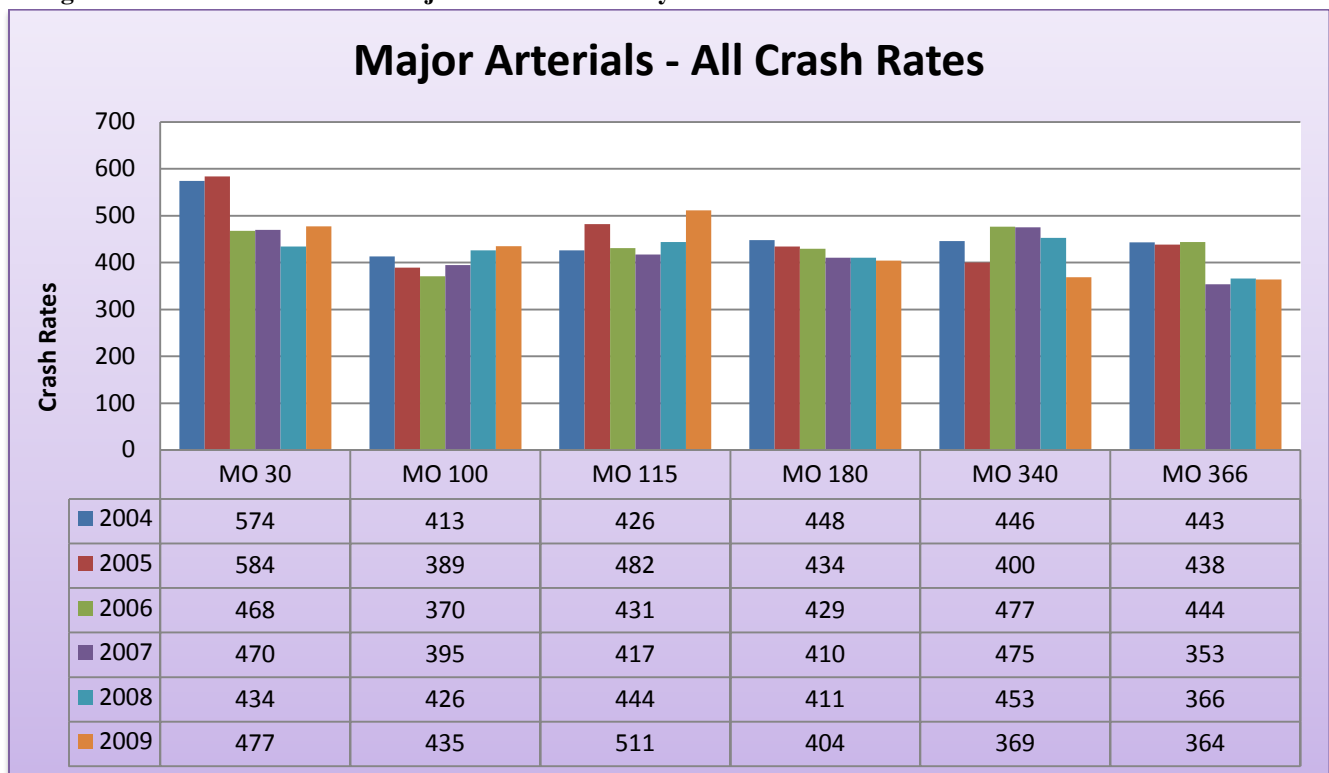


Figure 6 – All Crash Rates for Major Arterial Roadways



Major Conclusion

The major conclusions from the crash analysis and crash rate analysis are as follow:

1. Comparing the average of the pre-closure period (2004 through 2007) to closure period (2008 and 2009), the number of crashes increased (2.1 percent to 8.1 percent) for I-44, I-55, I-70. MO D and MO 100 in 2008 and increased (0.1 percent to 15.7 percent) for I-70, MO 100, MO 155 and MO 141 in 2009. Whereas the crash numbers decreased (2.9 percent to 51.7 percent) for all other routes in 2008 and decreased (4.2 percent to 72.5 percent) for all other routes in 2009.
2. Comparing the average of the pre-closure period (2004 through 2007) to closure period (2008 and 2009), the crash rates increased (2.1 percent to 8.6 percent) for I-55, I-70. MO D and MO 100 in 2008 and increased (0.1 percent to 15.5 percent) for I-70, MO 100, MO 115 and MO 141 in 2009. Whereas the crash numbers decreased (0.7 percent to 50.5 percent) for all other routes in 2008 and decreased (22.9 percent to 72.3 percent) for all other routes in 2009.
3. In cases of I-70 and MO 100, the increasing trend started before the I-64 closure (i.e., before 2008). Based on these pre-closure trends, it was difficult to imply that the I-64 closure caused an increase in crashes and crash rates for these roadways.
4. Although each route shows its own trend, the overall crashes on all three types of highways (i.e. freeways, expressways and major arterials) have decreased in both 2008 and 2009.
5. The significant crash reduction along I-64 segments (50 percent to 70 percent) that were not closed could be a good indicator on the regional awareness of project and their willingness in using designated alternative roadways.
6. Observations on Routes D and 340 saw noticeable safety improvements in 2009 that could have been caused partially by the increase arterial management implemented along these corridors.
7. In general, rear-end type (highest type of crash) decreased noticeably from 7757 in 2007 to 6728 in 2009.
8. The average number of crashes per year across the 4-year pre-closure period was 16,595 and compared against 15,111 in 2008 (8.9 percent below average) and 14,155 in 2009 (14.7 percent).
9. Based on the evaluation of crash (numbers and rates) and their associated trends along the 17 major diversionary roadways, the study team concludes that there was no strong evidence that the closure contributed to any increases in crashes and crash rates.

Introduction

1.1 Study's Objective

On January 2, 2008, the Missouri Department of Transportation (MoDOT) closed I-64 for reconstruction purposes. During the planning stages of this reconstruction project, the plan to close all lanes of roadways was met with concern, inciting questions from the general public like: *Could closing the roadway possibly contribute to more (or less) crashes than before on adjacent roadways? And, if noticeable changes existed in the number and types of crashes, are the changes due to closing I-64 or other influencing factors?*

This 2009 Annual Report and its companion 2008 Annual Report aims to answer these questions by examining crash data before and during the closure, and by providing objective explanations to the changes if any. This study retained the same analysis approach conducted in 2008 by conducting two separate analyses (Crash Analysis and Crash Rate Analysis). The following presents the main findings from the two analyses with the inclusion of 2009 crash information:

1.2 Methodology

The crash analysis was considered as a complicated and challenging task. This was mainly because there are multiple factors involved in crashes. For instance, the contributing factors could be roadway, congestion, weather, human error or combination of these factors. In order to investigate the multifaceted contributing factors efficiently, the following three procedural steps were used in this study:

Step 1 (data acquirement): As the first step of the analysis, the crash data will be obtained from MoDOT's Transportation Management System (TMS) database for selected roadways whose traffic patterns and safety trends could potentially be influenced by the I-64 closure. In addition to the crash data, annual average daily traffic (AADT) counts were also acquired to identify any causal relationship between traffic volume and crashes.

Step 2 (data organization): Second step was to develop a tool that can efficiently organize the information required for the analysis from the acquired crash data. This support tool should also be designed to effectively represent the extracted data in various formats such as graphs and tables, so that it can be a flexible tool for examining the multifaceted crash data.

Step 3 (data analysis): Adopting observational before-after analysis methods, this step examines the data extracted from the crash data using the tool developed in step 2 from different angles. For example, the crash data was extracted in a chronological sequence with different influencing factors such as severity, type, etc, and then examined to identify any evidence proving any change or impact of I-64 closure on the crashes on roadways around the construction area.

The results reported in this study are based on 6 years of crash data that includes 4 years of before and 2 years during the closure period. Since the closure was only for 2 years, this evaluation will base its findings and conclusions on available information. In the final report, the study team will use and conduct a statistical analysis to further investigate the findings and conclusions made in both the 2008 and this 2009 crash analysis reports.

2 Data Collection

2.1 Crash and Annual Average Daily Traffic (AADT) Data

MoDOT provided the research team with the crash data and the traffic volume data for 17 roadways selected by the team. Table S1 summarizes the list of roadways, their associated segment description and lengths that crash data was acquired. Besides crash data, Annual Average Daily Traffic (AADT) counts were also obtained for the investigation of the potential relationship between crashes and traffic volume. Since AADT data was available for shorter segment lengths, these shorter segments are collected and weighed based on traffic count information within each shorter segment to reflect the traffic count for the longer selected segments below. In order to find historical trend in crashes, all data was obtained for 6-year time period (i.e., 2004-2009).

Table S1: Segment Description and Lengths for Crash and AADT Data

Classification	Route	Mileage (miles)	From	To
Freeway	I-44	20.5	Antire Road	Jefferson Avenue
Freeway	I-55	16.40	IL. State Line	Meramec Bottom Road
Freeway	I-64	15	I-270	I-55
Freeway	I-70	22.6	MO Route 94	Walnut Street
Freeway	I-170	10.8	I-270	Galleria Parkway
Freeway	I-270	25.3	I-55	US 67 – Lindbergh
Expressway	US 40	14	Missouri Research Park	I-270
Expressway	US 61	11.2	I-64	I-55
Expressway	US 67	7.4	I-270	I-64
Expressway	MO 141	10.3	MO Route 340	I-44
Expressway	MO D	9.4	I-270	Skinker Parkway
Major Arterial	MO 30	15.5	Jefferson CO. Line	St. Louis City Limits
Major Arterial	MO 100	18.5	Baxter Road	6th Street
Major Arterial	MO 115	10.25	I-70 West Junction	I-70 East Junction
Major Arterial	MO 180	11.6	St. Charles Rock Road	Kingshighway
Major Arterial	MO 340	12.6	Ladue Road	Pennsylvania
Major Arterial	MO 366	11.1	I-44	Grand

3 Crash Data Analysis Results

3.1 Crash Analysis

In this study, crash data from 2004 through 2007 was used to develop the baseline information. Four years of pre-closure crash data was expected to provide a good base to evaluate and compare the I-64 two-year construction closure period. For more efficient comparison, all tables and graphs are grouped into three categories according to the roadway type, i.e.

- a) Freeway roadways including I-44, I-55, I-64, I-70, I-170 and I-270,
- b) Expressway roadways including US 40, US 61, US 67, MO 141 and MO D, and
- c) Major Arterial roadways MO 30, MO 100, MO 115, MO 180, MO 340 and MO 366.

In order to understand a basic picture about the crash trends from 2004 to 2009, all crashes happening from 2004 through 2009 on all roadways were summarized. Table S2 and Figure S1 through S3 illustrate the total number of crashes by roadway type. In 2009, total crashes can be compared to other years and to the average across all six-years of crash data.

This crash data does reflect the normal un-predictability associated with crash information when comparing year-to-year. Patterns and trends are noticed when comparing several years of information. In all freeway crashes, there is noticeable downward decreasing trend since 2006. This same trend to a less degree is also noticed in expressway since 2007 and major arterials since 2005. I-270 is demonstrating downward decrease trend since 2007, while I-70 is demonstrating upward increasing trend since 2007. These freeway facilities were designated and marked, by construction signing, as alternative routes during the closure and for the most part did serve as the most popular diversionary roadways.

I-64 in 2008 and 2009 experienced significant reduction of 429 and 797 crashes less than those in 2007 (reduction of 36 to 66 percent). Obviously, this reduction was due to the I-64 re-construction closure. This proves if you close a roadway you can reduce crashes. However, it should also be noticed that total crashes in 2008 and 2009 on all freeway roadways also decreased by 539 and 1560 respectively when compared to 2007. This overall reduction exceeds the reduction on I-64. This indicates that although I-64 closure caused the traffic to spread to other routes, the total regional crashes on major interstate roadways around the closure area still had a noticeable reduction.

For the most part, most roadways have not experienced a dramatic change over the six-year period. This further enforces the logic that I-64 closure did not adversely impact safety on other roadway facilities that were used as alternative routes around the closed section.

When comparing the average across the six-year period (2004 through 2009) with 2009, the number of crashes were up or increased for I-70, MO 141 and MO 100 whereas the number of crashes were down or decreased for I-44, I-55, I-64, I-170, I-270, US 40, US 61, US 67, MO D,

MO 115, MO 180, MO 340, and MO 366. The change in number of crashes varied with some experiencing significant while other remained about the same. However, it was interesting to observe (in Table S2) that although each route has its own trend, the overall crashes on all three types of roadways decreased in 2009 during the closure, when compared to the previous years before 2007.

In general, the combined totals for the 6-year (2004-2009) period, experienced an overall crash reduction while many of these roadways experienced an increase in traffic. These factors continue to reaffirm the result regarding impacts to regional traffic safety during the closure period as being no adverse impact to adjacent roadways.

Table S2: Total Crashes by Year (2004 - 2009)

Classification	Route	2004	2005	2006	2007	2008	2009	Average
Freeway	I-44	1,100	1,084	1,065	1,077	1,131	879	1,056
Freeway	I-55	964	960	974	952	998	890	956
Freeway	I-64	1,624	1,610	1,494	1,205	717	408	1,176
Freeway	I-70	1,907	1,884	1,902	1,996	2,078	2,223	1,998
Freeway	I-170	906	770	830	805	776	558	774
Freeway	I-270	2,103	2,201	2,302	2,287	2,083	1,804	2,130
	All	8,604	8,509	8,567	8,322	7,783	6,762	8,091
Expressway	US 40	489	536	553	529	344	469	487
Expressway	US 61	853	828	819	791	761	781	806
Expressway	US 67	484	396	396	358	345	392	395
Expressway	MO 141	503	566	504	589	503	625	548
Expressway	MO D	728	682	636	690	699	464	650
	All	3,057	3,008	2,908	2,957	2,652	2,731	2,886
Major Arterial	MO 30	1,298	1,297	1,049	1,048	941	1,025	1,110
Major Arterial	MO 100	1,179	1,085	1,019	1,086	1,146	1,196	1,119
Major Arterial	MO 115	455	432	382	370	385	411	406
Major Arterial	MO 180	879	822	721	689	675	630	736
Major Arterial	MO 340	1,071	939	1,061	1,059	1,003	879	1,002
Major Arterial	MO 366	655	645	652	519	526	521	586
	All	5,537	5,220	4,884	4,771	4,676	4,662	4,958
Combine Totals		17,198	16,737	16,359	16,050	15,111	14,155	15,935

Figure S1 – All Crashes for Freeway Roadways

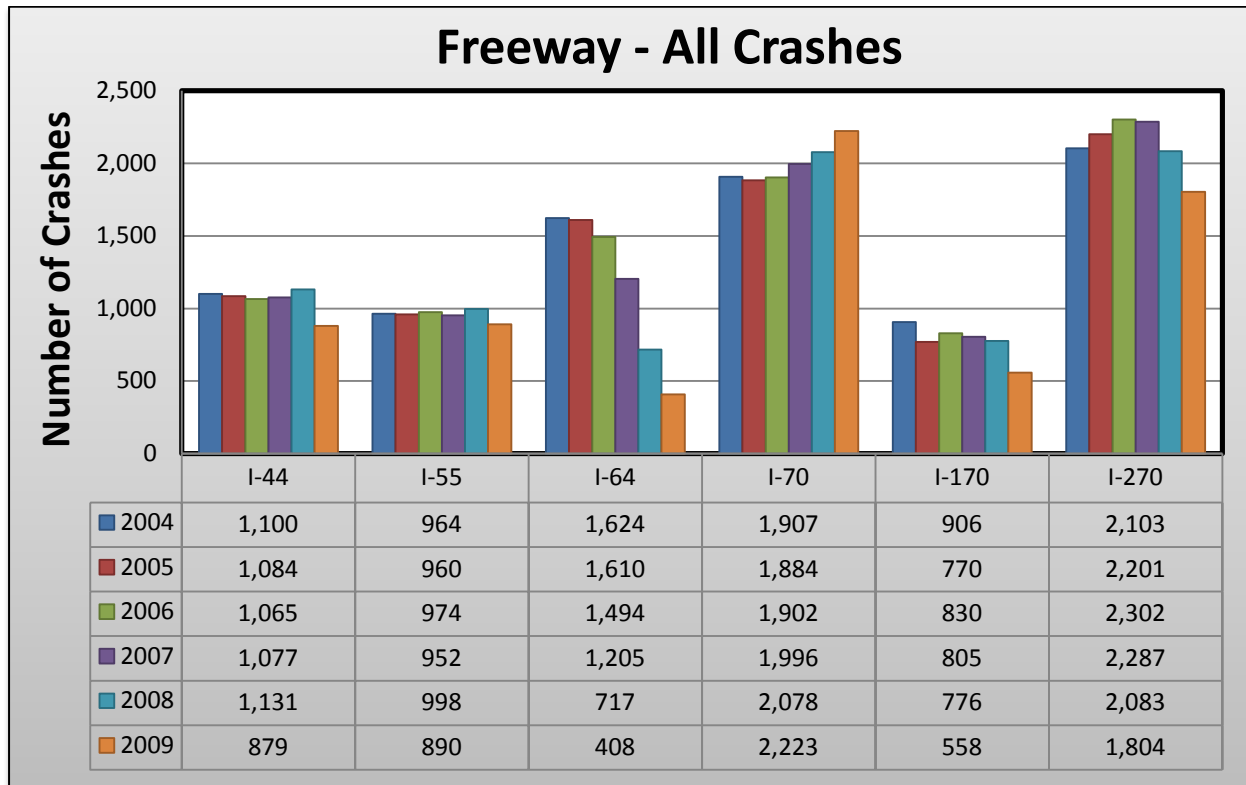


Figure S2 – All Crashes for Expressway Roadways

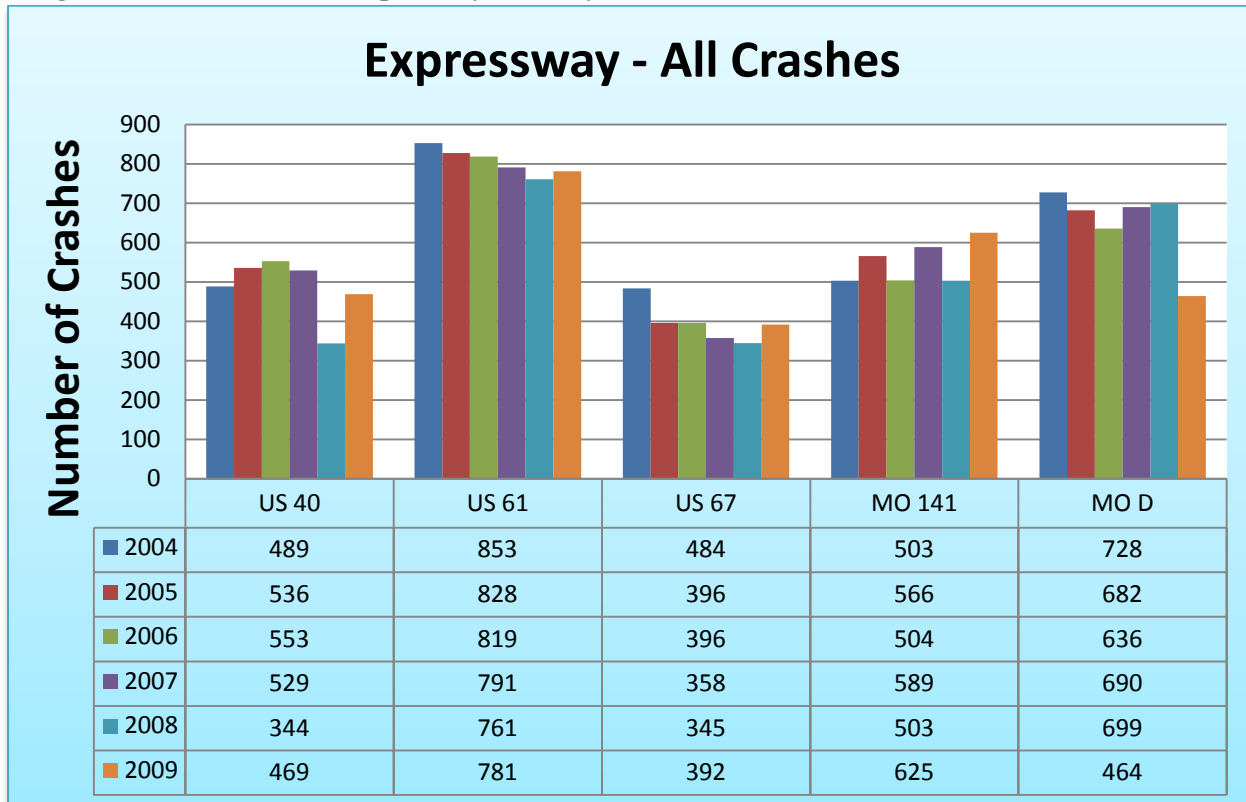
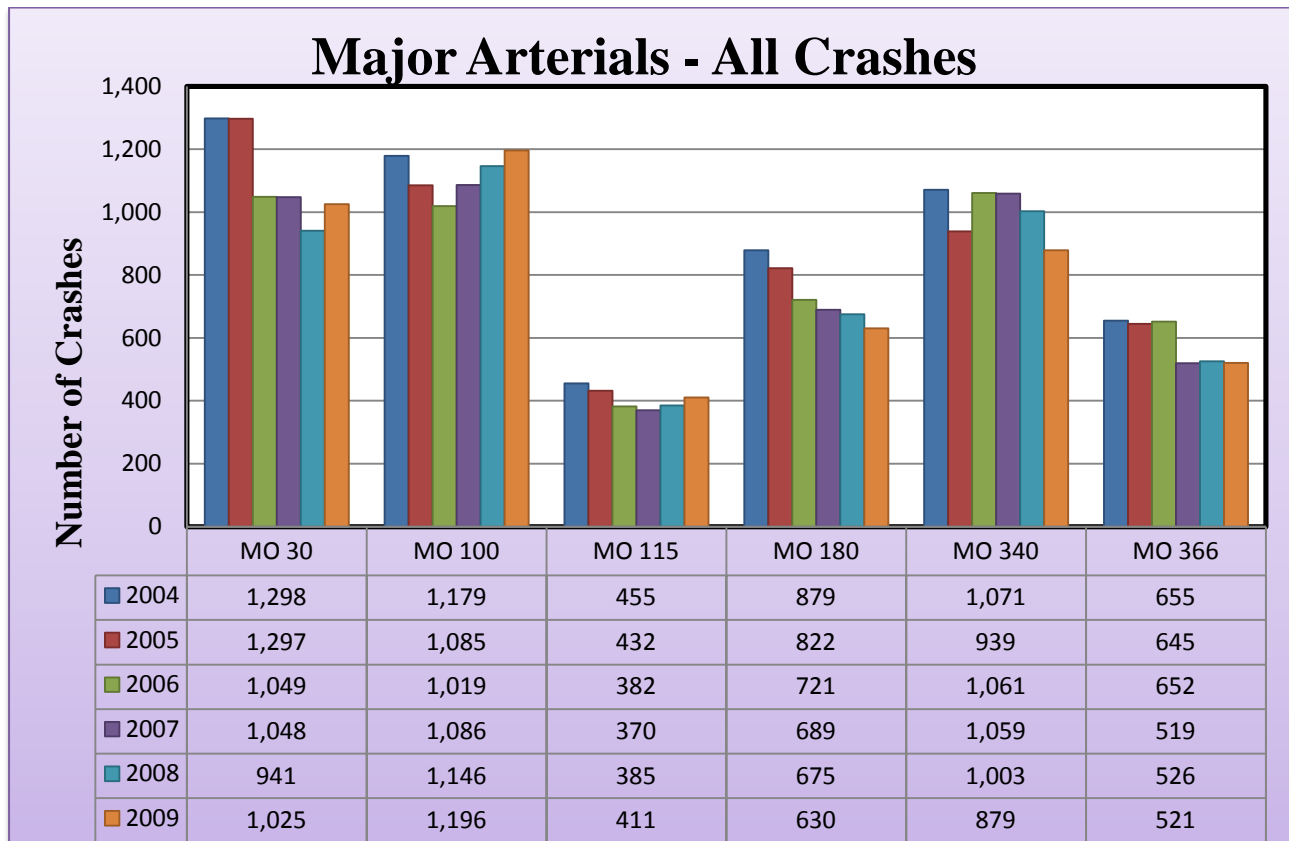


Figure S3 – All Crashes for Major Arterial Roadways



Although solid statistical validation was needed, this quick inspection described above leads us to a tentative conclusion that there was no strong evidence proving that I-64 closure contributed to an increased number of crashes on the adjacent roadways.

For a more detailed evaluation on crash numbers, various figures have been prepared and presented in the Appendix based on the combination of influencing variables such as crash severity and cause. As mentioned earlier in this report and in the 2008 Crash Report, the crash rate analysis is a better comparative methodology when investigating potential safety impacts. The remaining part of this report will be dedicated to the crash rate analysis.

3.2 Crash Rate Analysis

The crash rate represents the intensity or exposure to crashes relative to total vehicle miles traveled. For example, if roadway A shows a higher crash rate than roadway B, it indicates that roadway A was more vulnerable to crashes than roadway B. Crash rates consider traffic volume, roadway lengths and days to create a standardized method for comparing roadways. For a given segment of a roadway, crash rate (CR) is given by:

$$\text{CRASH} = \frac{\text{Number of crashes for the section}}{\text{Total vehicle miles traveled}} \quad (1)$$

- Days = Number of days for the study,
- AADT = Annual Average Daily Traffic is a weighted AADT as shown below based segments define in table S1,
- Length = Length of Section,

(2)

As explained, crash rate calculation requires not only the number of crashes but also traffic volumes (in vehicles per day), length of the roadway (in miles) and period being evaluated (in days). MoDOT provided the team with AADT information for the highways based the previous Table S1 segment of roadways which were used in this study.

Annual Average Daily Traffic (AADT) for six-year evaluation is displayed in Table S2. These annual average daily traffic volumes are seasonally adjusted to reflect annual average conditions.

Table S2 – Weighted AADT

<u>Classification</u>	<u>Route</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Freeway	I-44	103,554	104,050	105,969	106,500	109,679	114,483
Freeway	I-55	101,755	101,872	109,144	110,235	109,552	103,117
Freeway	I-64	131,235	130,998	132,404	131,095	128,032	130,807
Freeway	I-70	126,538	127,442	122,046	123,334	123,846	128,223
Freeway	I-170	102,955	103,073	103,820	104,858	104,208	101,957
Freeway	I-270	159,966	160,161	163,650	165,286	163,590	166,383
Expressway	US 40	106,765	106,550	105,118	104,120	102,156	99,087
Expressway	US 61	48,975	47,937	49,856	49,856	48,655	47,485
Expressway	US 67	34,663	33,928	30,041	30,041	29,680	29,324
Expressway	MO 141	35,941	35,181	35,745	35,745	35,015	37,942
Expressway	MO D	53,125	52,260	52,584	52,352	51,192	53,062
Major Arterial	MO 30	39,872	39,256	39,653	39,421	38,219	37,945
Major Arterial	MO 100	42,167	41,277	40,737	40,737	39,754	40,743
Major Arterial	MO 115	28,445	23,944	23,705	23,705	23,133	21,493
Major Arterial	MO 180	46,233	44,717	39,682	39,682	38,725	36,827
Major Arterial	MO 340	52,097	51,011	48,405	48,437	48,052	51,808
Major Arterial	MO 366	37,156	36,373	36,248	36,248	35,374	35,334

Crash rates over the past 6 years (2004-2009) are presented in Table S3 and displayed in Figures S4, S5 and S6.

Table S3 – Crash Rates

Classification	Route	2004	2005	2006	2007	2008	2009
Freeway	I-44	142	139	134	135	137	103
Freeway	I-55	158	157	149	144	152	144
Freeway	I-64	225	224	206	168	102	57
Freeway	I-70	182	179	189	196	203	210
Freeway	I-170	223	190	203	195	188	139
Freeway	I-270	142	149	152	150	138	117
Expressway	US 40	89	98	103	99	66	92
Expressway	US 61	425	423	402	388	382	401
Expressway	US 67	516	432	488	441	429	494
Expressway	MO 141	371	428	375	438	381	437
Expressway	MO D	398	380	353	384	397	254
Major Arterial	MO 30	574	584	468	470	434	477
Major Arterial	MO 100	413	389	370	395	426	435
Major Arterial	MO 115	426	482	431	417	444	511
Major Arterial	MO 180	448	434	429	410	411	404
Major Arterial	MO 340	446	400	477	475	453	369
Major Arterial	MO 366	443	438	444	353	366	364

Figure S4 – All Crash Rates for Freeway Roadways

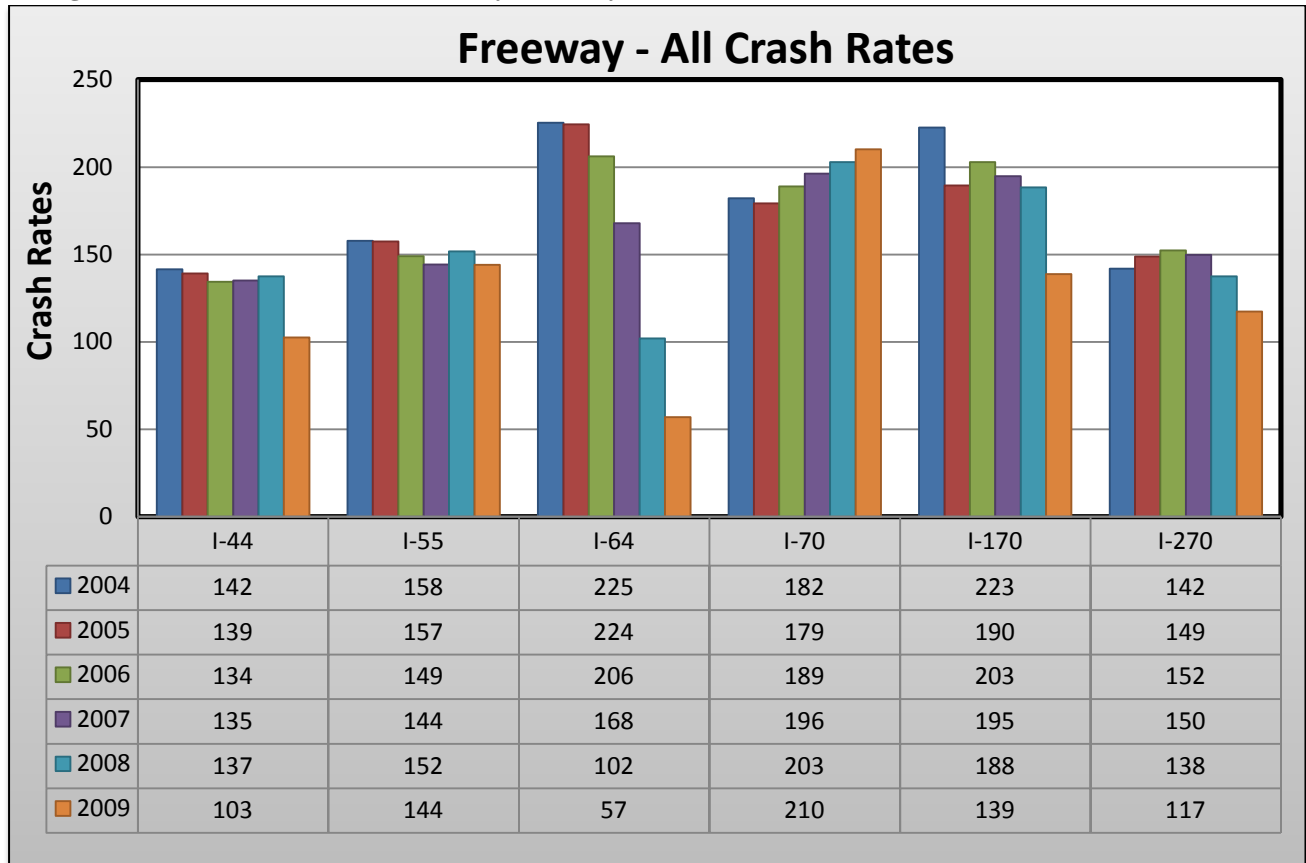


Figure S5 – All Crash Rates for Expressway Roadways

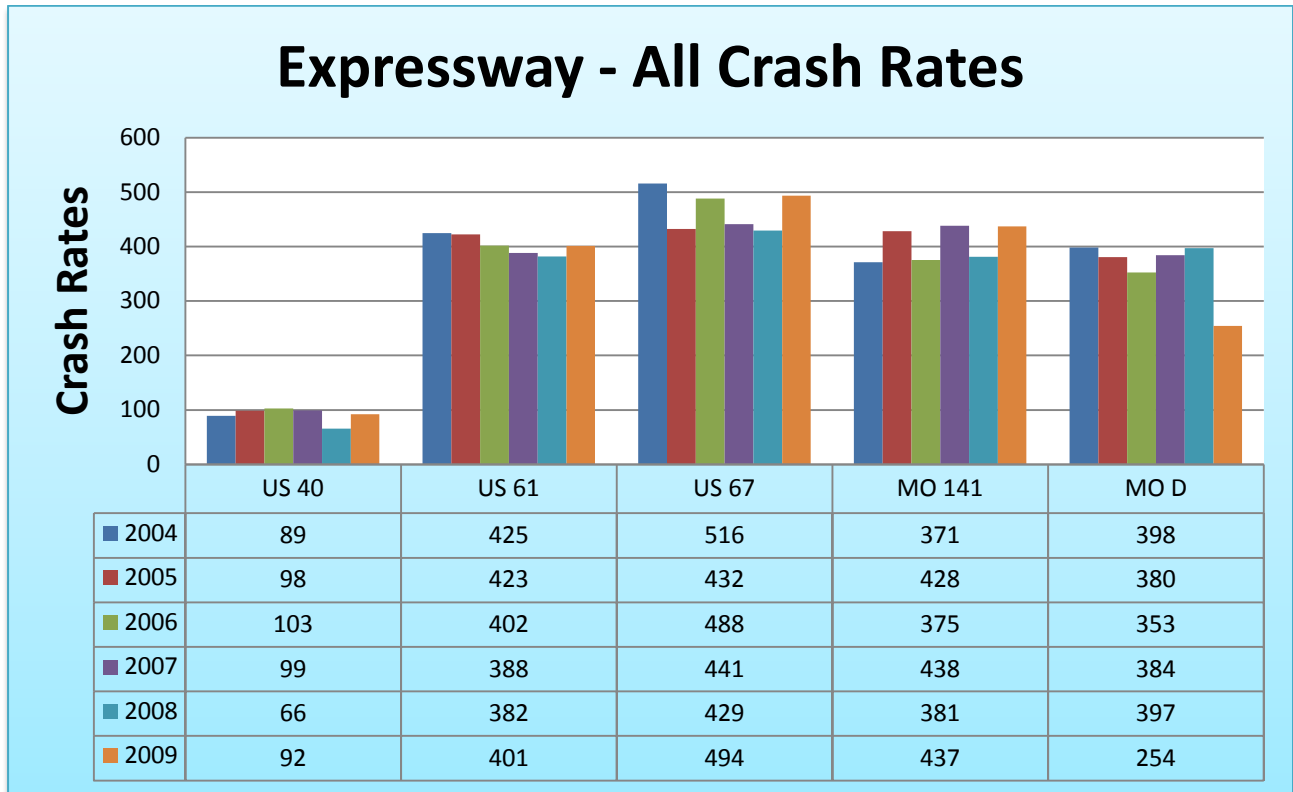
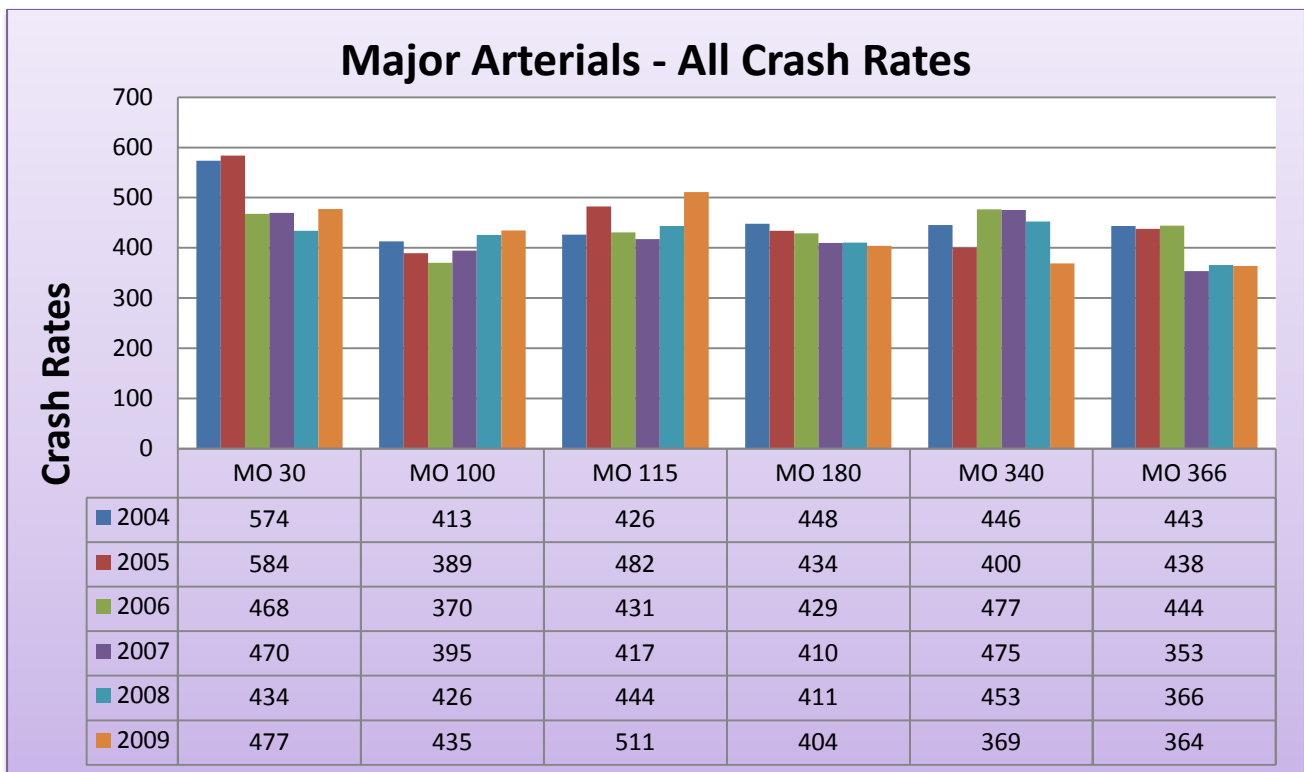


Figure S6 – All Crash Rates for Major Arterial Roadways



Another way to view crash rates is to analyze the annual crash rate to a base year (like year 2004). This permits at a quick glance to see how the crash rates have changed over time when compared to base year. A value greater than 1 shows an increase while a value less than 1 shows a decrease. Corresponding 'relative' crash rates are provided in Table S4 and shown in Figures S7, S8 and S9.

Table S4 – Relative Crash Rates based Base Year 2004

Classification	Route	2004	2005	2006	2007	2008	2009
Freeway	I-44	1.00	0.98	0.95	0.95	0.97	0.72
Freeway	I-55	1.00	1.00	0.94	0.91	0.96	0.91
Freeway	I-64	1.00	1.00	0.91	0.74	0.45	0.25
Freeway	I-70	1.00	0.98	1.04	1.08	1.11	1.15
Freeway	I-170	1.00	0.85	0.91	0.87	0.85	0.62
Freeway	I-270	1.00	1.05	1.07	1.06	0.97	0.83
Expressway	US 40	1.00	1.10	1.15	1.11	0.74	1.03
Expressway	US 61	1.00	0.99	0.95	0.91	0.90	0.94
Expressway	US 67	1.00	0.84	0.95	0.86	0.83	0.96
Expressway	141	1.00	1.15	1.01	1.18	1.03	1.18
Expressway	D	1.00	0.95	0.89	0.96	1.00	0.64
Major Arterial	30	1.00	1.02	0.81	0.82	0.76	0.83
Major Arterial	100	1.00	0.94	0.90	0.96	1.03	1.05
Major Arterial	115	1.00	1.13	1.01	0.98	1.04	1.20
Major Arterial	180	1.00	0.97	0.96	0.92	0.92	0.90
Major Arterial	340	1.00	0.90	1.07	1.07	1.02	0.83
Major Arterial	366	1.00	0.99	1.00	0.80	0.83	0.82

Figure S7 – Relative All Crash Rates for Freeway Roadways (Base Year 2004)

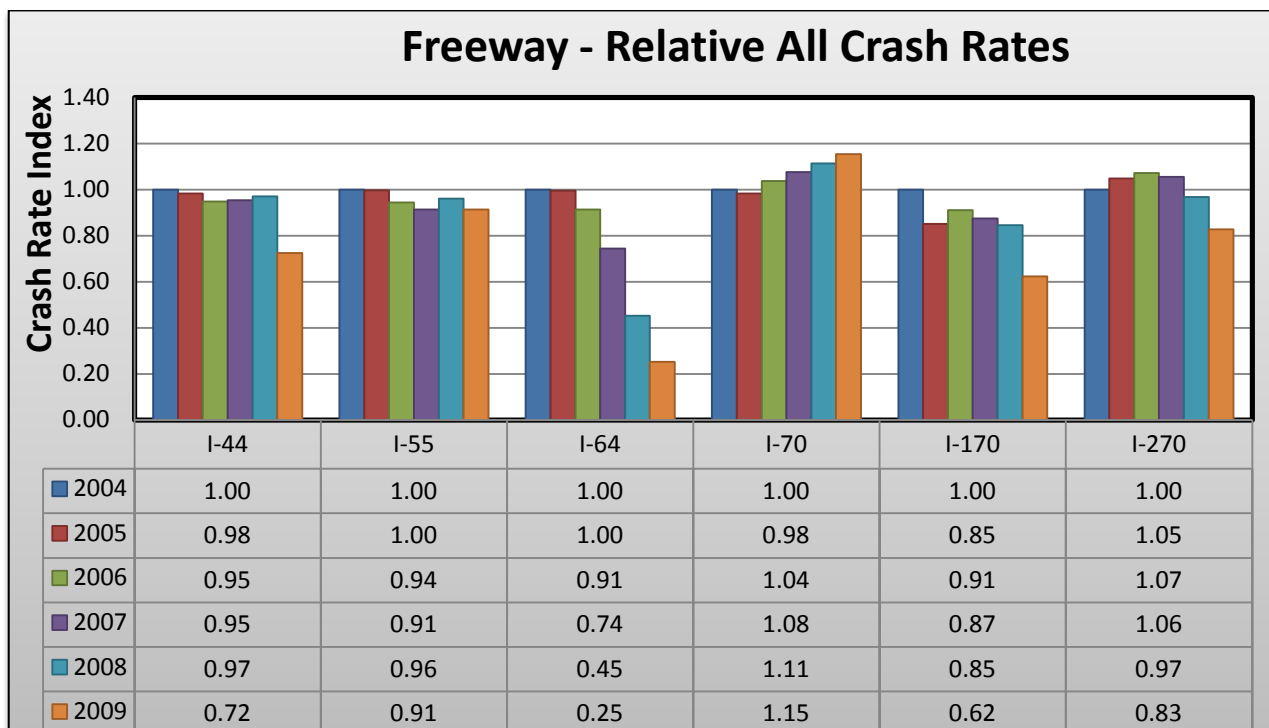


Figure S8 – Relative All Crash Rates for Expressway Roadways (Base Year 2004)

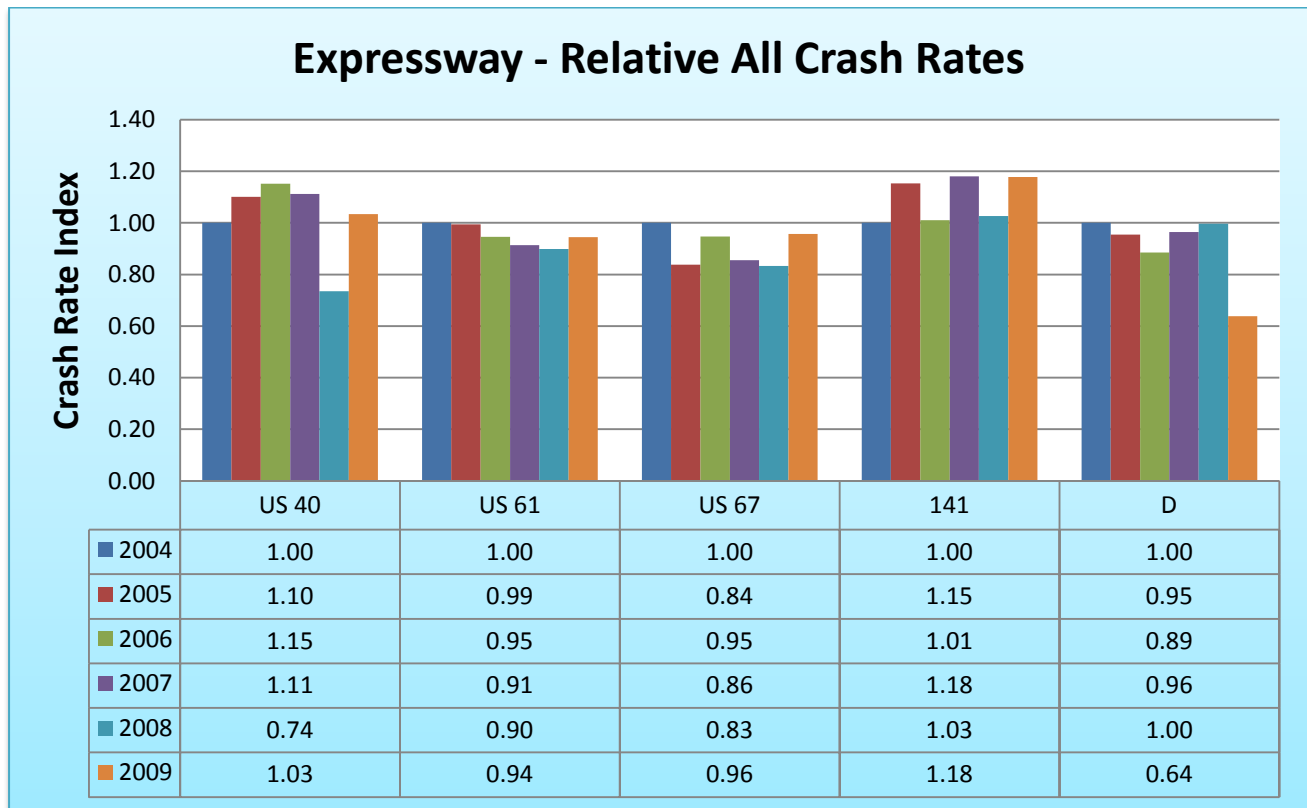
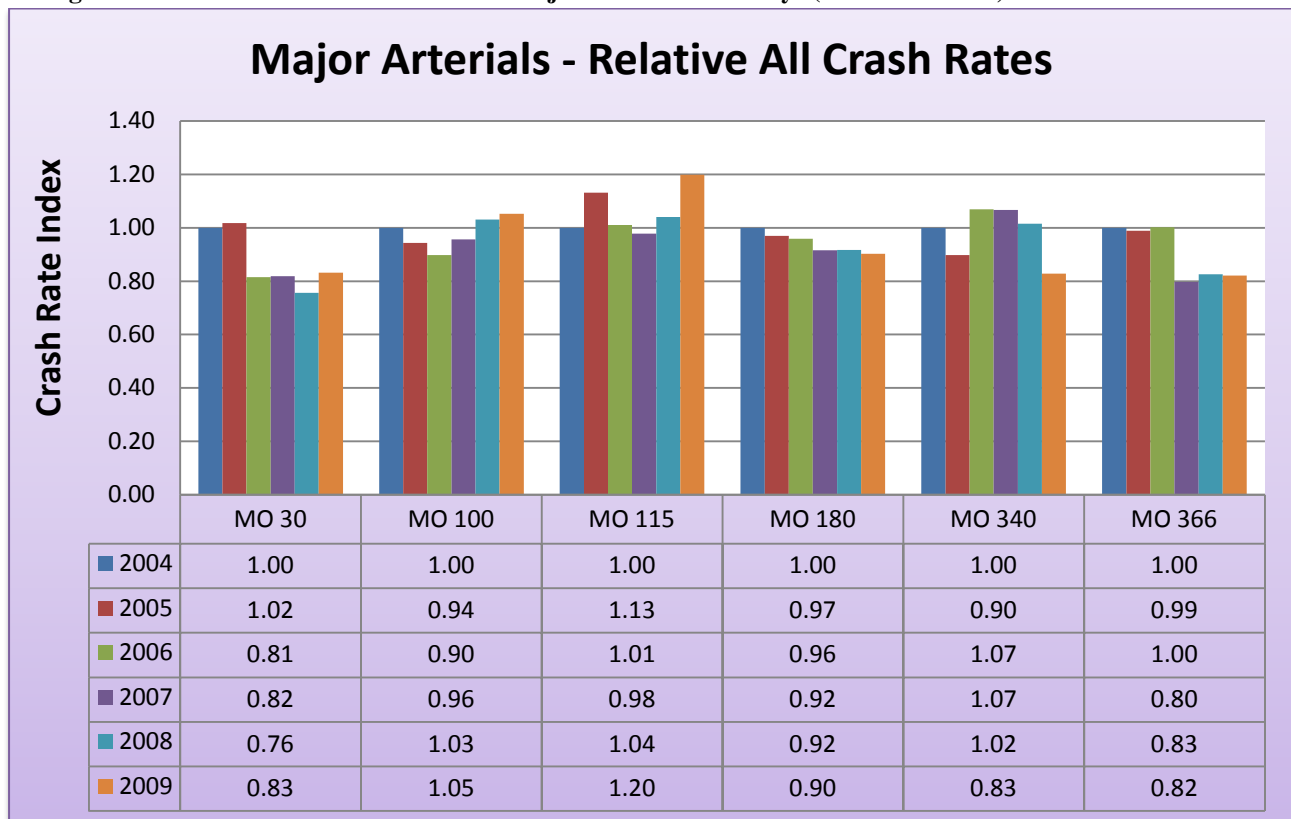


Figure S9 – Relative All Crash Rates for Major Arterial Roadways (Base Year 2004)



Crash Severity and Types Evaluation

The information discussed thus far in this report have centered on all crashes. All crashes expressed in both crash numbers and crash rates provide a very good overview of the information reviewed in the 2009 report. Similar trends and patterns have been observed in both crash severity and crash types. This report's Appendix section contains figures and tables that show evaluation results based on severity and crash type.

Property Damage Only Crashes Evaluation

'Property Damage Only' crashes represent approximately 72 percent to 80 percent of all crashes reviewed in this study. Table S5 and Figures S10 through S12 are shown to provide an example of the crash severity evaluation.

Table S5 – Property Damage Only Crashes

Classification	Route	2004	2005	2006	2007	2008	2009	Average
Freeway	I-44	823	836	813	814	849	677	802
Freeway	I-55	677	701	706	712	742	658	699
Freeway	I-64	1,215	1,183	1,144	913	558	301	886
Freeway	I-70	1,373	1,320	1,377	1,421	1,464	1,579	1,422
Freeway	I-170	680	555	625	633	592	429	586
Freeway	I-270	1,633	1,630	1,732	1,744	1,568	1,393	1,617
	All	6,401	6,225	6,397	6,237	5,773	5,037	6,012
Expressway	US 40	345	368	395	407	257	362	356
Expressway	US 61	650	652	643	597	592	547	614
Expressway	US 67	357	292	295	267	251	306	295
Expressway	MO 141	368	448	397	472	417	521	437
Expressway	MO D	566	523	489	534	557	367	506
	All	2,286	2,283	2,219	2,277	2,074	2,103	2,207
Major Arterial	MO 30	998	971	773	790	691	805	838
Major Arterial	MO 100	932	855	806	878	934	938	891
Major Arterial	MO 115	356	328	289	266	281	312	305
Major Arterial	MO 180	660	585	528	496	493	461	537
Major Arterial	MO 340	839	714	845	822	766	685	779
Major Arterial	MO 366	515	467	492	377	398	393	440
	All	4,300	3,920	3,733	3,629	3,563	3,594	3,790
Combine Totals		12,987	12,428	12,349	12,143	11,410	10,734	12,009

Figure S10 – Property Damage Only Crashes Freeway Roadways

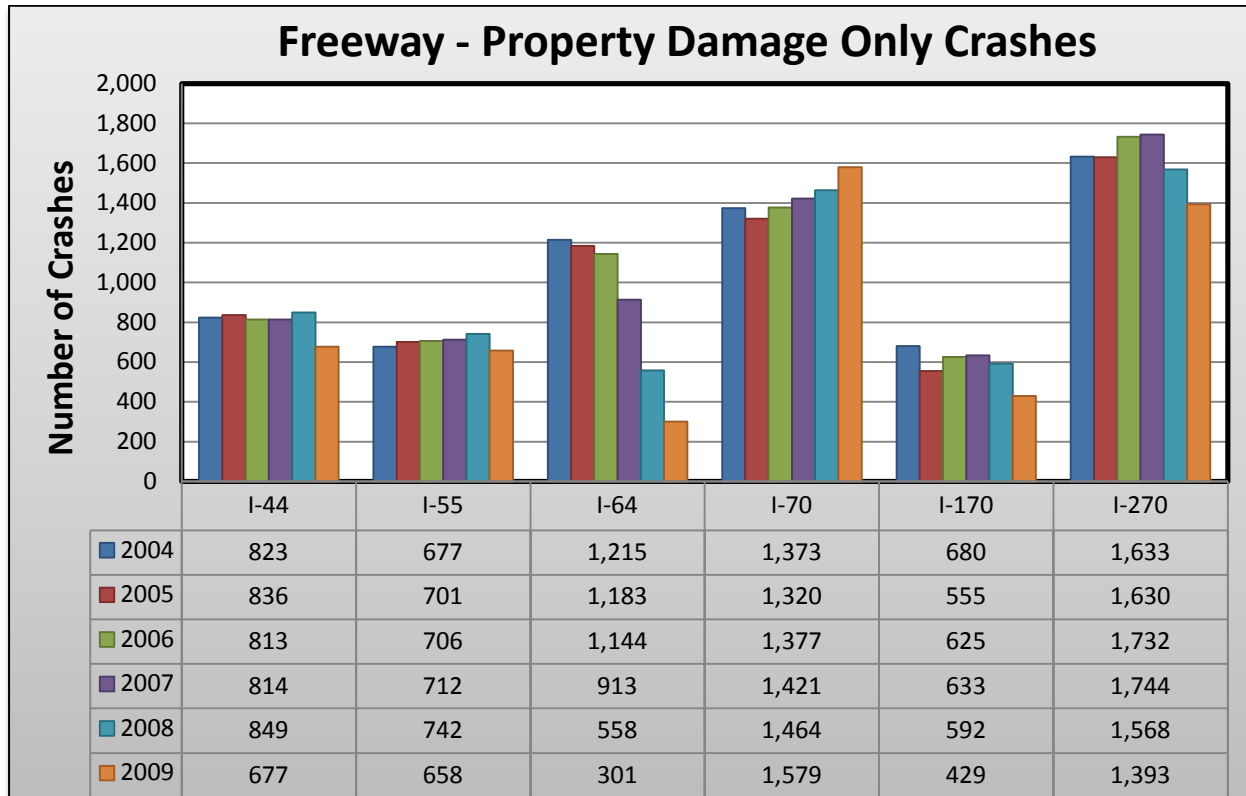


Figure S11 – Property Damage Only Crashes Expressway Roadways

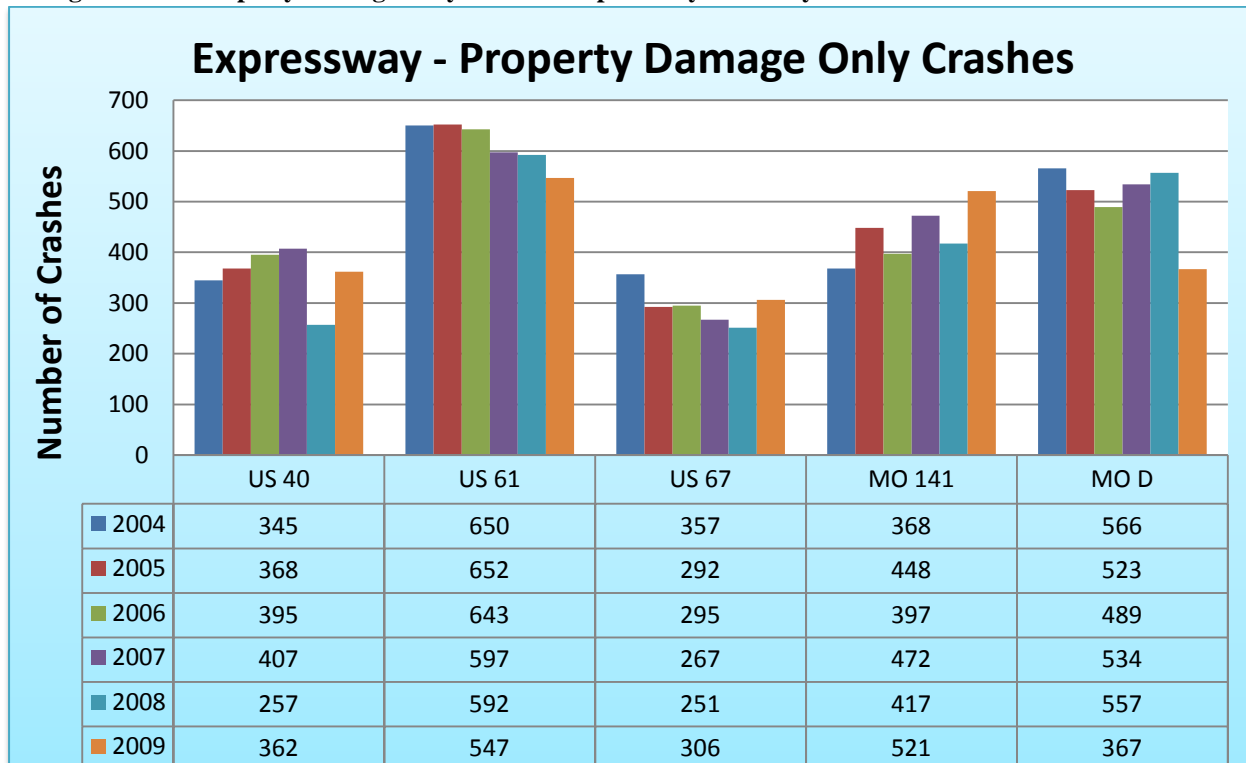
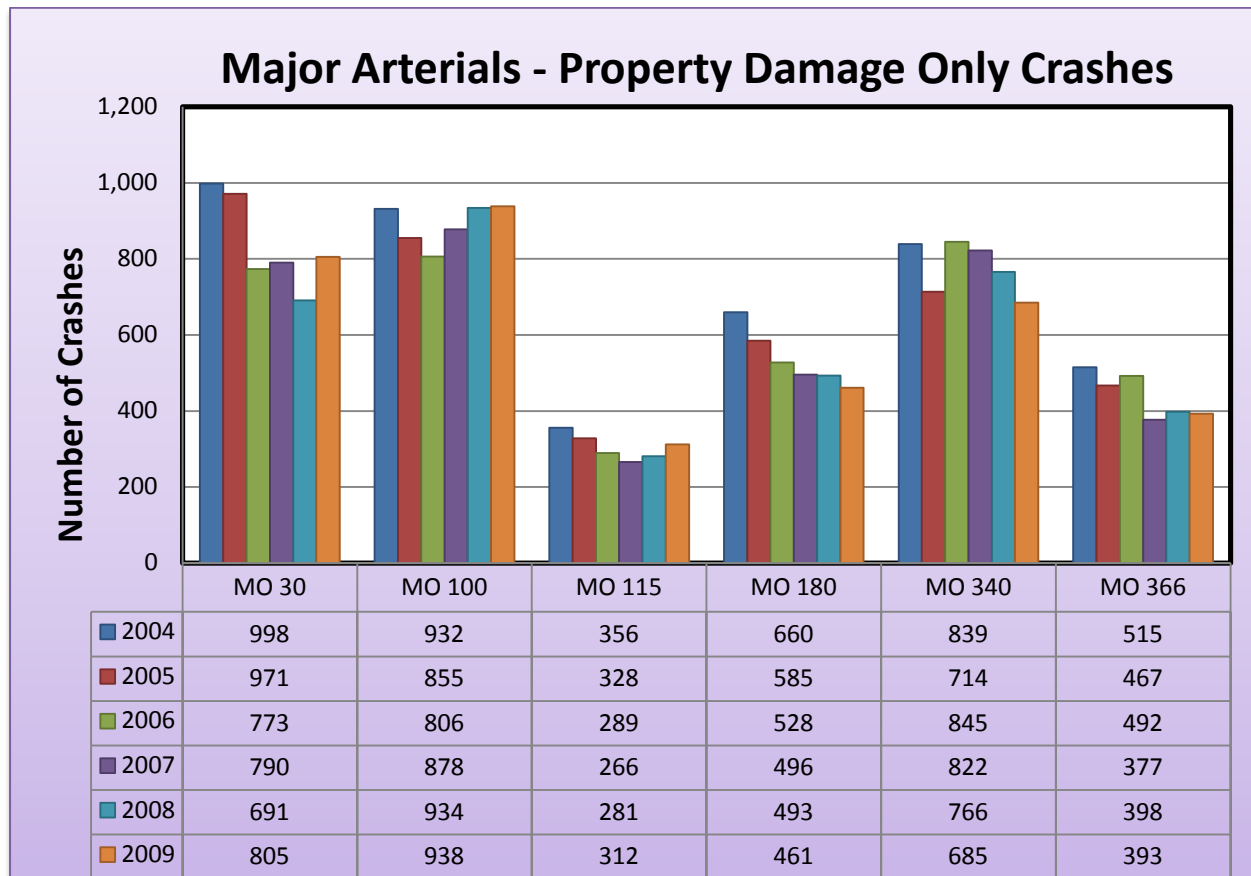


Figure S12 – Property Damage Only Crashes Major Arterial Roadways



Rear-End Type Crashes Evaluation

Rear-end type crash by far represents the most predominated type of crash. Percentage of crashes along 17 roadway corridors ranges between 30 percent and 65 percent of total crashes. Table S6 and Figures S13 through S15 provide an example of the crash type evaluation.

Table S6 – Rear-end Type Crashes

Classification	Route	2004	2005	2006	2007	2008	2009	Average
Freeway	I-44	472	462	461	478	433	347	442
Freeway	I-55	362	344	363	318	328	286	334
Freeway	I-64	971	844	800	595	308	197	619
Freeway	I-70	691	675	661	656	655	823	694
Freeway	I-170	455	389	466	472	362	296	407
Freeway	I-270	1,151	1,146	1,358	1,387	1,203	1,081	1,221
All	Average	4,102	3,860	4,109	3,906	3,289	3,030	3,716
Expressway	US 40	287	294	337	353	198	318	298
Expressway	US 61	442	418	408	391	401	381	407
Expressway	US 67	272	224	198	195	160	208	210
Expressway	MO 141	301	344	344	393	308	439	355
Expressway	MO D	363	373	334	364	352	189	329
Major Arterial	MO 30	518	490	474	444	372	451	458
Major Arterial	MO 100	532	486	448	514	573	600	526
Major Arterial	MO 115	158	143	92	106	97	161	126
Major Arterial	MO 180	386	389	320	313	317	279	334
Major Arterial	MO 340	579	531	552	587	565	467	547
Major Arterial	MO 366	270	249	269	191	203	205	231
	All	2,443	2,288	2,155	2,155	2,127	2,163	2,222
Combine Totals		8,210	7,801	7,885	7,757	6,835	6,728	7,536

Figure S13 – Rear-end Type Crashes Freeway Roadways

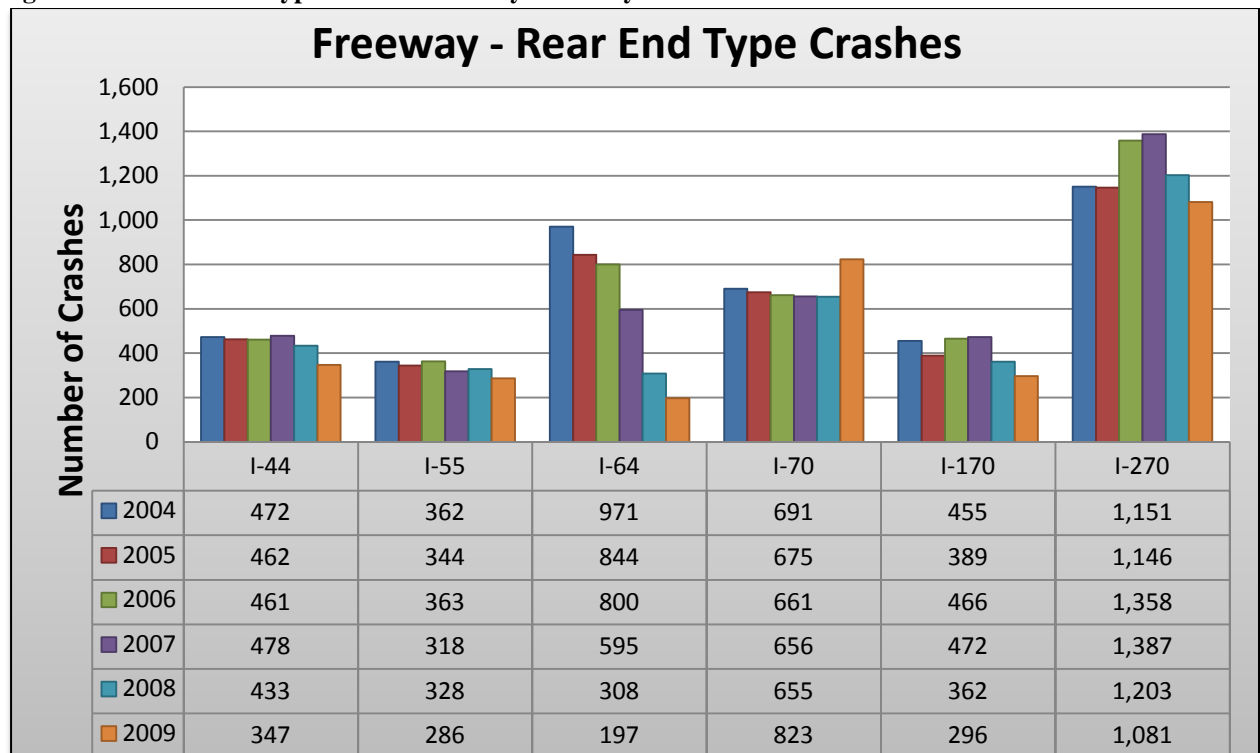


Figure S14 – Rear-end Type Crashes Expressway Roadways

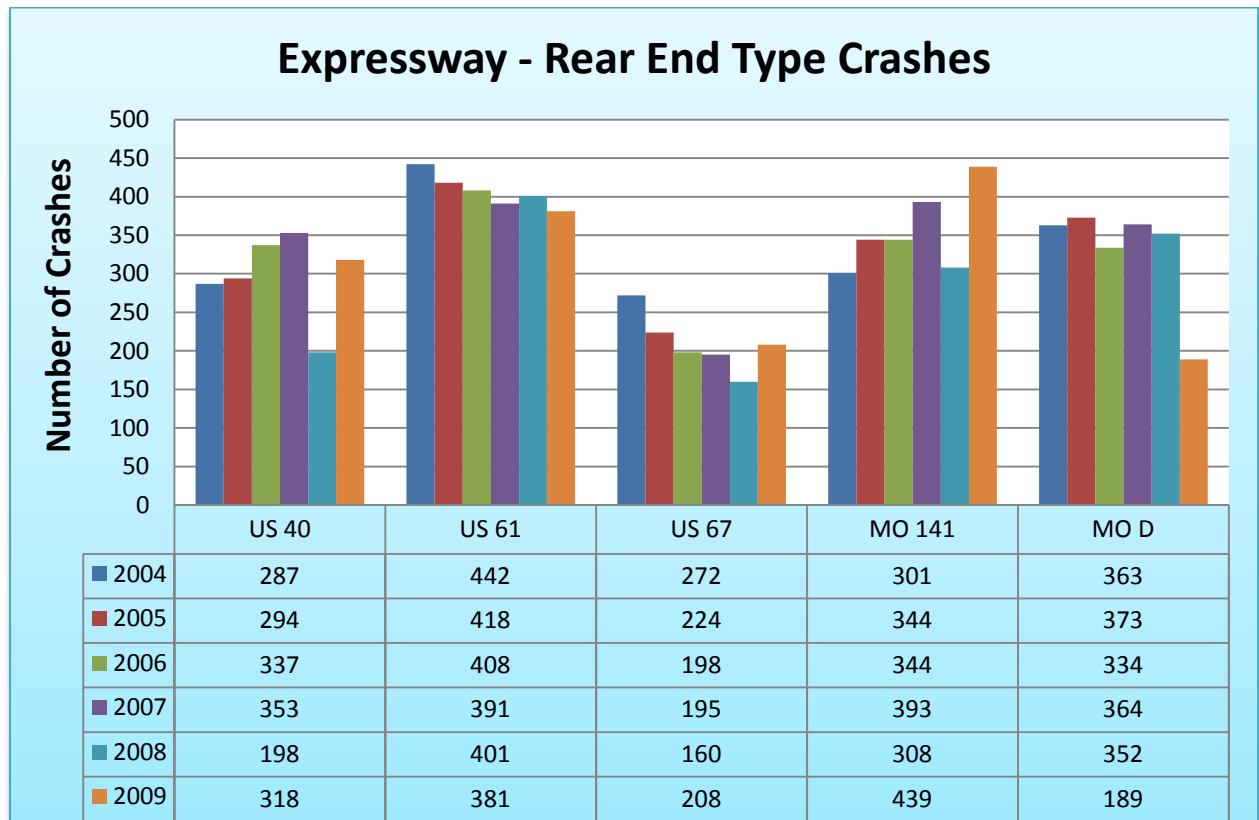
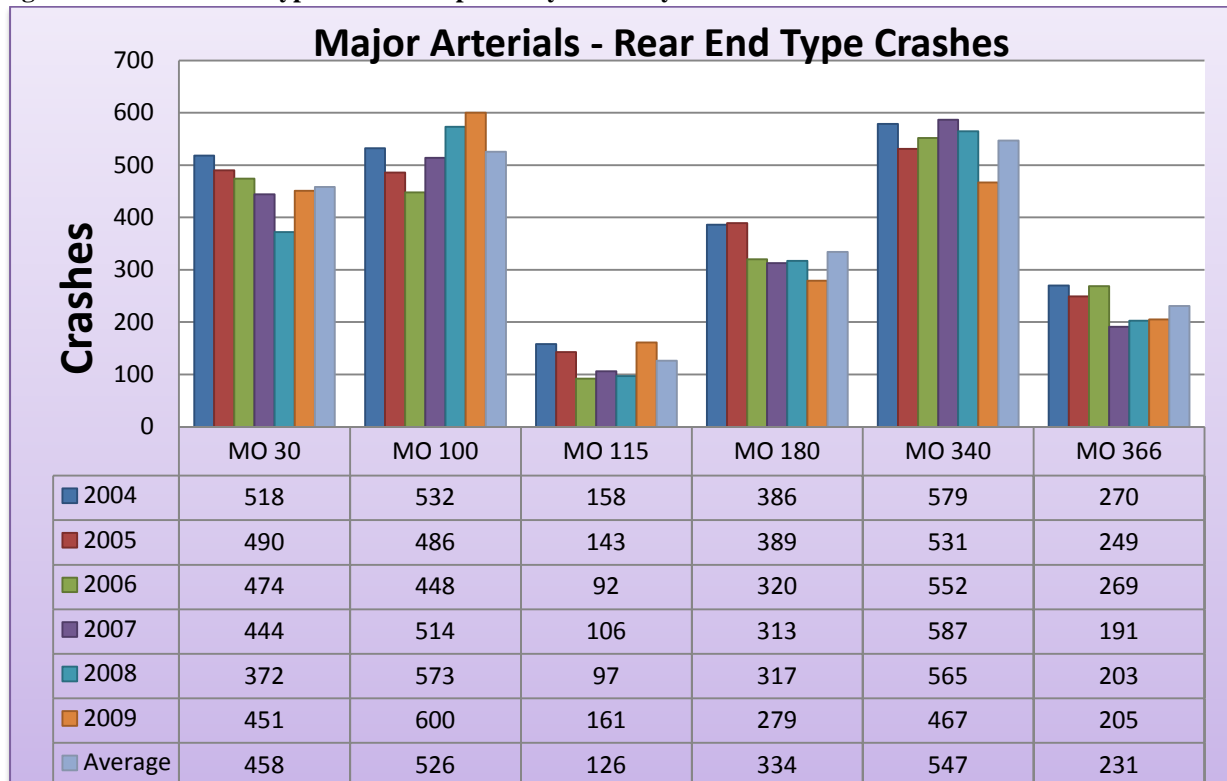


Figure S15 – Rear-end Type Crashes Expressway Roadway



General Findings

Freeways

I-44, I-64, I-170 and I-270 showed a general decreasing trend for crash rates especially after 2007. Again, I-64 (I-270 to I-55 downtown) was impacted by the closure and showed significant reduction in crash rates. In reviewing the 2009 crash rate index, I-44, I-55, I-64, I-170 and I-270 experienced reduction in crash rates from the 2004 base year a 28 percent, 9 percent, 75 percent, 35 percent and 17 percent reduction. I-70 was the only freeway roadway that experienced an increase in crash rate in 2009. A further in-depth crash investigation beyond the scope of this project could provide a better insight to why I-70 is not following a similar decreasing trend noticed in all freeways.

Expressways

The US Route 40 (I-270 and Missouri Research Park) was recently designated as I-64 with the upgrade completion out to I-70 near Wentzville. This roadway was at a freeway standard and its crash rates reflect the higher standard roadway with similar freeway crash rates. US Route 61, US Route 67 and Route D have been stable over the 6-year evaluation with Route D having a noticeable decrease in crash rates of 36 percent in 2009 based on the 2004 base year. Route 141 has shown no noticeable trend other than increasing one year and decreasing the next year. It would be good to investigate these routes in the future, to determine the impact to the investment made in an extensive regional arterial management system that was part of the preparatory work to I-64 project. Reduction in crash rates in 3 of the 4 expressways made in part have been the results of the long-term investment of the regional arterial management system in these adjacent roadways.

Major Arterials

Routes 30, 180, 340 and 366 have shown a decreasing crash rate trend throughout the six-year or at least the past 3 to 4 years with respective decreases of 17 percent, 10 percent, 17 percent and 18 percent when compared to the 2004 base year. Routes 100 and 115 have experienced fluctuating trends across the six-year period. Route 100 has seen a slight fluctuation between 10 percent decrease to 5 percent increase when compared to the 2004 base year. Route 115 has seen a slightly higher fluctuation between 2 percent decrease to a 20 percent increase when compared to the 2004 base year. As mentioned in the expressways' findings, the investment made in the regional arterial management system may have long-term value in improved safety and traffic flow along these corridors, too.

Conclusion

From this evaluation, we can conclude that no observational evidence was found to prove the fact that I-64 closure influences increased crashes on adjacent highways around the closure. The support of this conclusion is based on the following points:

- I-64 experienced a decrease in crashes of 1,841 in 2008 and 2009 when compared to the 4-year pre-closure average for 2004 through 2007

- Sixteen other adjacent roadways evaluated experienced a decrease in crashes of 2,125 in 2008 and 2009 when compared to the 4-year pre-closure average for 2004 through 2007
- Crashes and Crash Rates decreased for most freeways, expressways and major arterials with only I-70, Route 141, Route 100 and Route 115 showing increases on the 2-year closure period
- The following table compares the pre-closure 4-year period to 2008 and 2009 for 17 roadways evaluated in the study. The only increase was in ‘out of control’ type crashes:

Table S7 Comparison Severity and Crash Types

Severity	2004- 2007 Average	2008	2009	Percent Change 2008 and 2009
Fatal	46	39	26	-15 % and -43%
Disabling Injury	306	295	247	-4% and -19%
Minor Injury	3766	3367	3148	-11% and -16%
Property Damage Only	12477	11410	10734	-9% and -14%
All Crashes	16595	15111	14155	-9% and -15%
Crash Type	2004- 2007 Average	2008	2009	Percent Change 2008 and 2009
Rear-end	7913	6835	6728	-14% and -15%
Out of Control	2280	2584	2490	+13% and +9
Passing	1934	1660	1367	-14% and -29%
Other Type	4464	4035	3523	-10% and -21%

Please note a negative (-) means a decrease in crashes and positive (+) means an increase in crashes

Appendix

EXHIBIT CRASH ANALYSIS

Table S8 All Crashes by Year (2004 through 2009)

Classification	Route	2004	2005	2006	2007	2008	2009	Average
Freeway	I-44	1,100	1,084	1,065	1,077	1,131	879	1,056
Freeway	I-55	964	960	974	952	998	890	956
Freeway	I-64	1,624	1,610	1,494	1,205	717	408	1,176
Freeway	I-70	1,907	1,884	1,902	1,996	2,078	2,223	1,998
Freeway	I-170	906	770	830	805	776	558	774
Freeway	I-270	2,103	2,201	2,302	2,287	2,083	1,804	2,130
	All	8,604	8,509	8,567	8,322	7,783	6,762	8,091
Expressway	US 40	489	536	553	529	344	469	487
Expressway	US 61	853	828	819	791	761	781	806
Expressway	US 67	484	396	396	358	345	392	395
Expressway	MO 141	503	566	504	589	503	625	548
Expressway	MO D	728	682	636	690	699	464	650
	All	3,057	3,008	2,908	2,957	2,652	2,731	2,886
Major Arterial	MO 30	1,298	1,297	1,049	1,048	941	1,025	1,110
Major Arterial	MO 100	1,179	1,085	1,019	1,086	1,146	1,196	1,119
Major Arterial	MO 115	455	432	382	370	385	411	406
Major Arterial	MO 180	879	822	721	689	675	630	736
Major Arterial	MO 340	1,071	939	1,061	1,059	1,003	879	1,002
Major Arterial	MO 366	655	645	652	519	526	521	586
	All	5,537	5,220	4,884	4,771	4,676	4,662	4,958
Combine Totals		17,198	16,737	16,359	16,050	15,111	14,155	15,935

Figure S15 – All Freeway Crashes

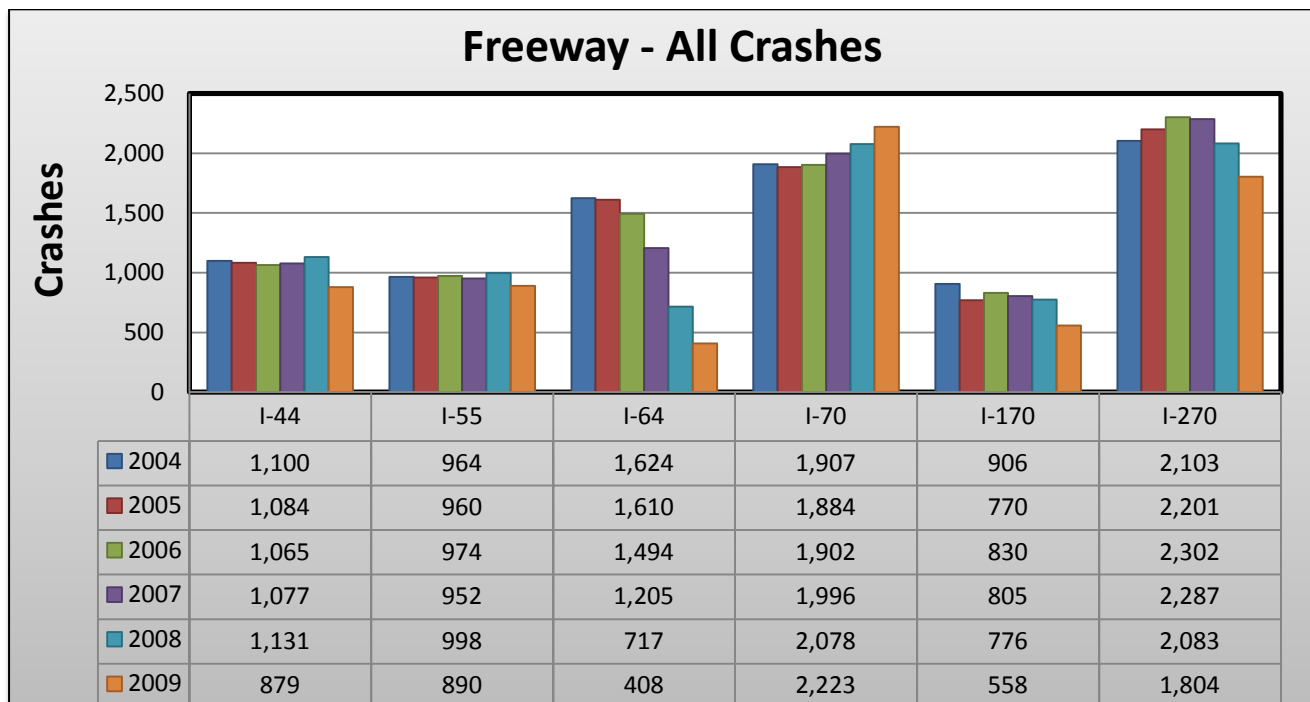


Figure S16 – All Expressway Crashes

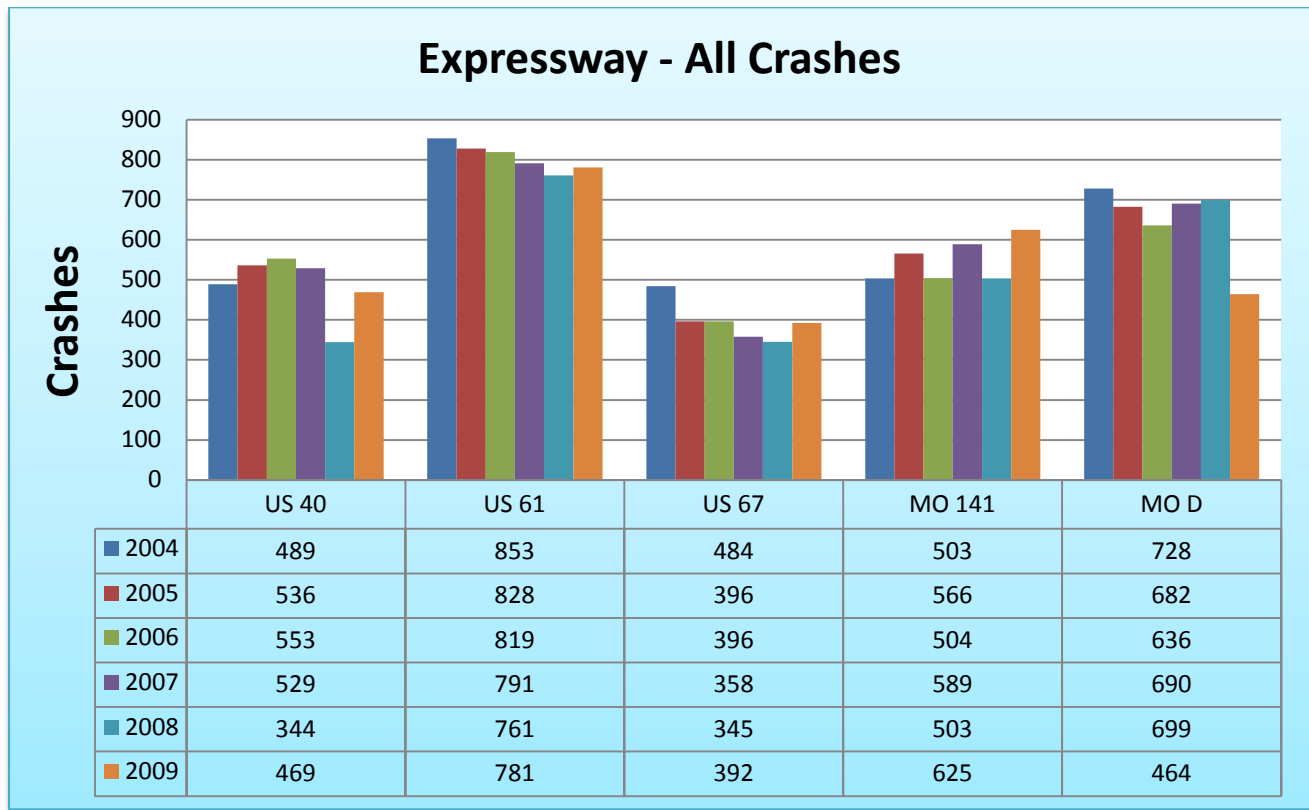


Figure S17 – All Major Arterial Crashes

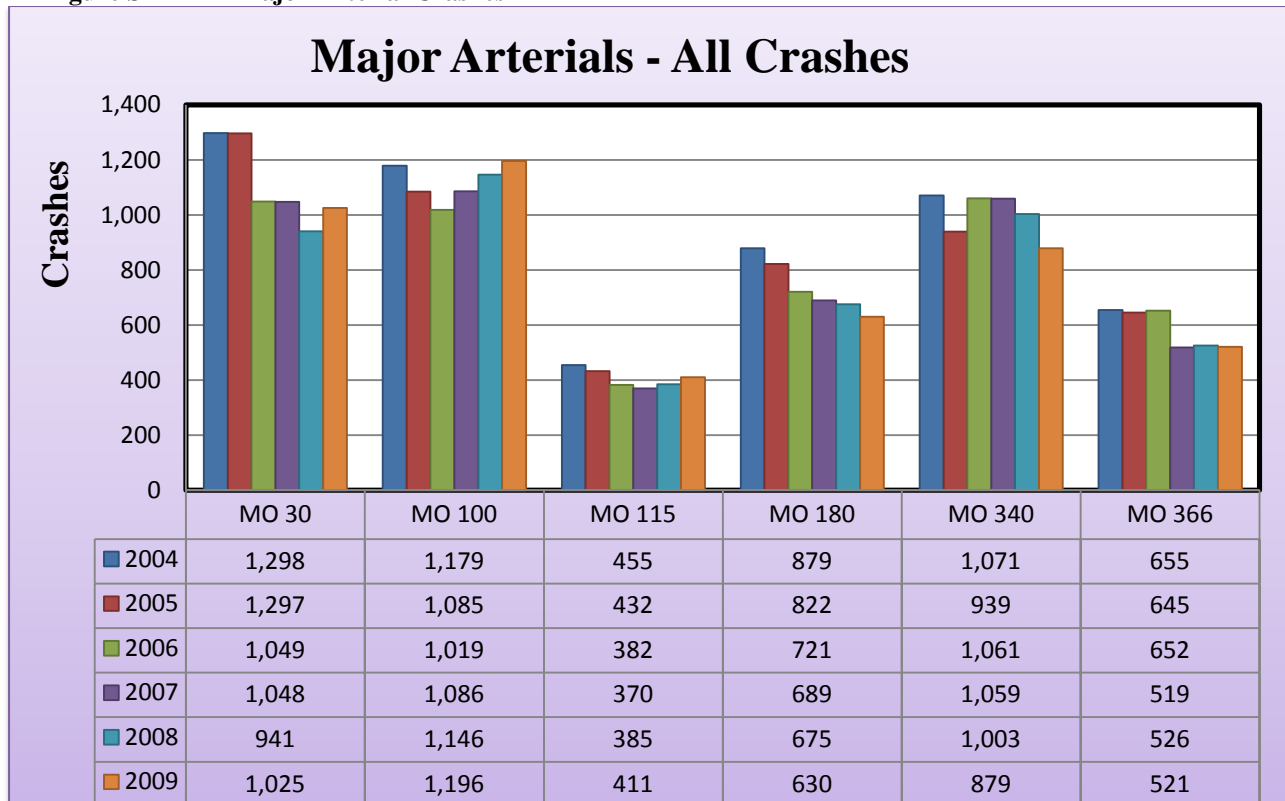


Table S9 All Fatal Crashes

Classification	Route	2004	2005	2006	2007	2008	2009	Average
Freeway	I-44	5	3	8	6	3	1	4.3
Freeway	I-55	10	7	7	4	5	7	6.7
Freeway	I-64	6	4	5	3	1	0	3.2
Freeway	I-70	2	10	5	6	15	8	7.7
Freeway	I-170	5	3	2	1	6	1	3.0
Freeway	I-270	6	8	4	4	0	2	4.0
	All	34	35	31	24	30	19	28.8
Expressway	US 40	2	0	1	1	1	0	0.8
Expressway	US 61	0	1	1	0	0	1	0.5
Expressway	US 67	2	0	3	1	3	0	1.5
Expressway	MO 141	0	1	0	1	0	1	0.5
Expressway	MO D	2	1	4	0	3	0	1.7
	All	6	3	9	3	7	2	5.0
Major Arterial	MO 30	5	8	3	3	2	0	3.5
Major Arterial	MO 100	0	1	0	1	0	1	0.5
Major Arterial	MO 115	1	1	1	0	0	0	0.5
Major Arterial	MO 180	1	1	1	1	0	2	1.0
Major Arterial	MO 340	3	1	1	1	0	0	1.0
Major Arterial	MO 366	0	0	1	2	0	2	0.8
	All	10	12	7	8	2	5	7.3
Combine Totals		50	50	47	35	39	26	41

Figure S18 – Freeway Fatal Crashes

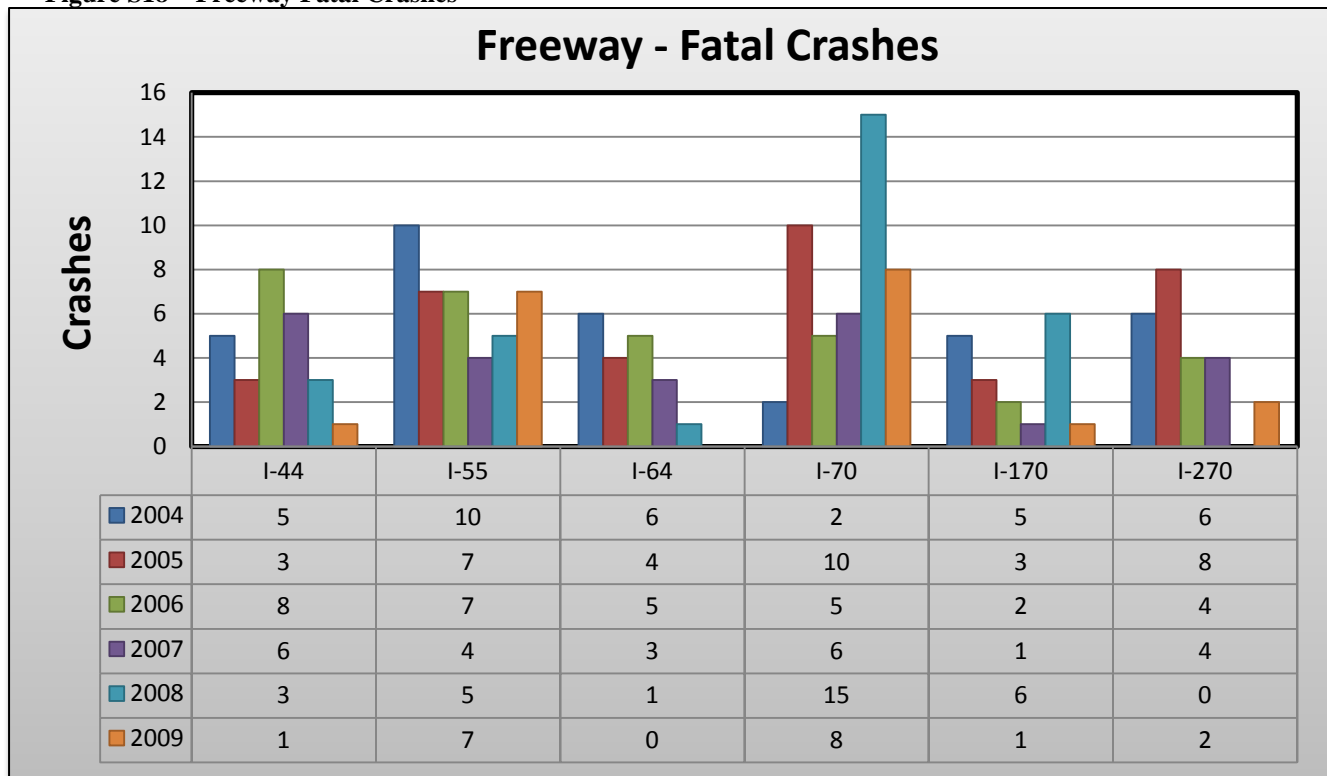


Figure S19 – Expressway Fatal Crashes

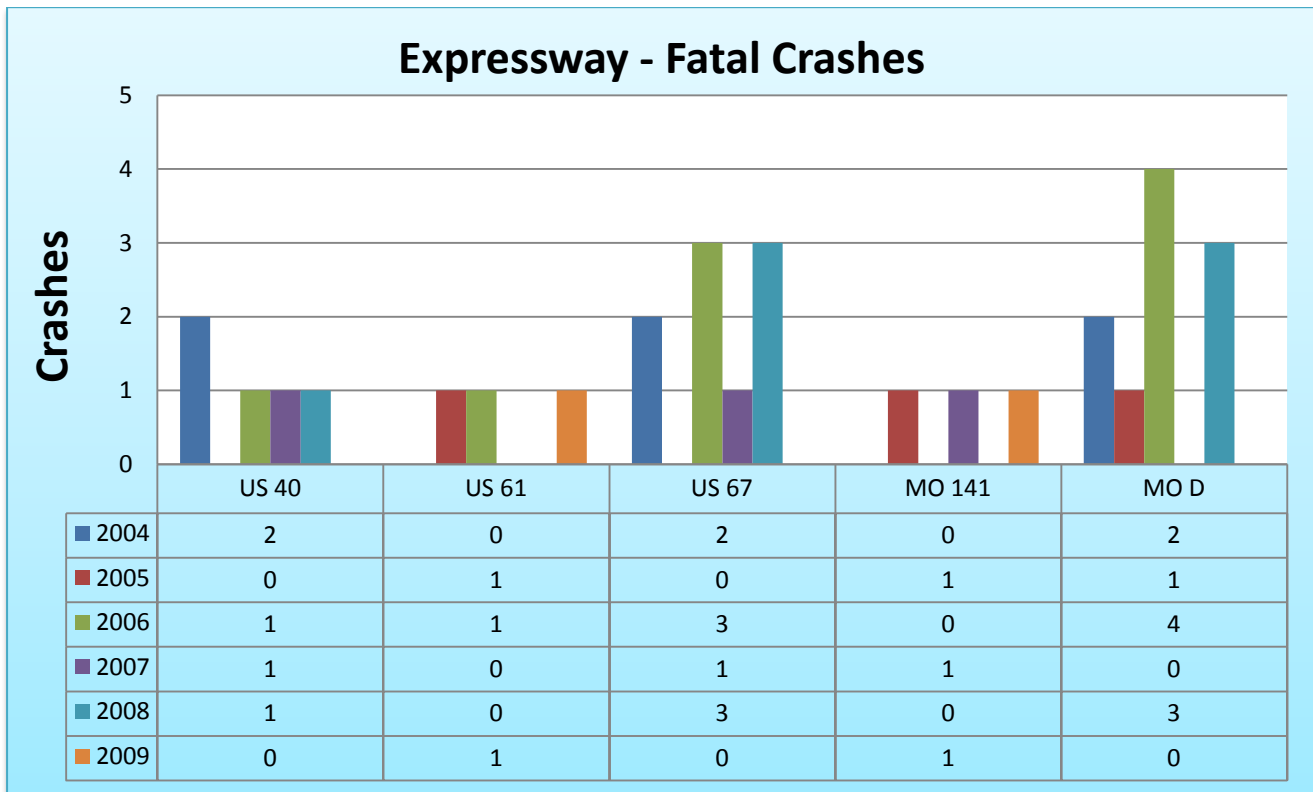


Figure S20 – Major Arterial Fatal Crashes

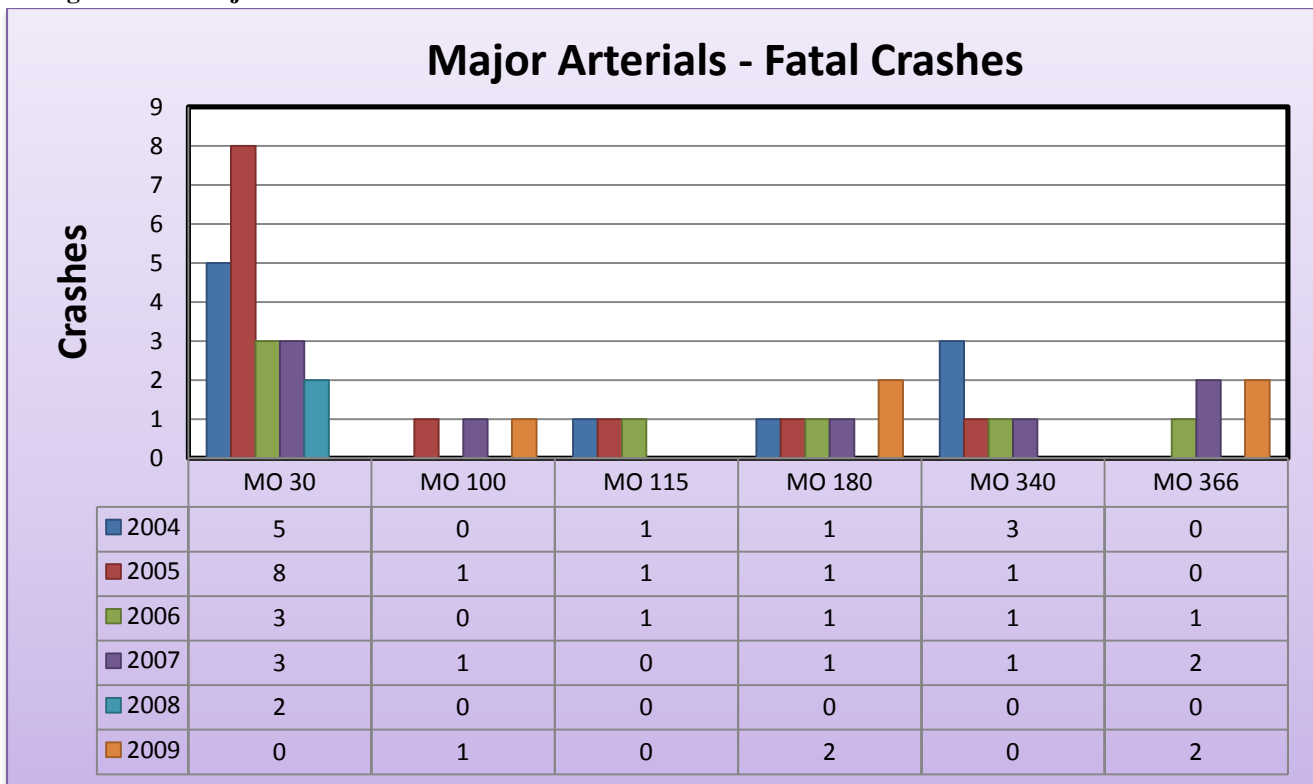


Table S10 All Disabling Injury Crashes

Classification	Route	2004	2005	2006	2007	2008	2009	Average
Freeway	I-44	25	11	18	19	23	18	19
Freeway	I-55	26	32	32	23	24	21	19
Freeway	I-64	24	16	19	13	8	6	14
Freeway	I-70	50	35	45	59	65	47	50
Freeway	I-170	26	19	19	9	16	12	17
Freeway	I-270	49	49	36	42	41	31	41
	All	200	162	169	165	177	135	168
Expressway	US 40	8	12	7	9	5	4	8
Expressway	US 61	16	13	11	9	10	8	11
Expressway	US 67	9	10	11	7	9	6	9
Expressway	MO 141	10	8	3	3	3	6	6
Expressway	MO D	14	13	13	8	13	10	12
	All	57	56	45	36	40	34	45
Major Arterial	MO 30	30	22	23	15	21	13	21
Major Arterial	MO 100	25	16	8	18	14	26	18
Major Arterial	MO 115	5	5	7	6	9	8	7
Major Arterial	MO 180	19	16	10	16	13	9	14
Major Arterial	MO 340	11	19	11	15	18	18	15
Major Arterial	MO 366	8	13	12	3	3	4	7
	All	98	91	71	73	78	78	82
Combine Totals		355	309	285	274	295	247	294

Figure S21 – Freeway Disabling Injury Crashes

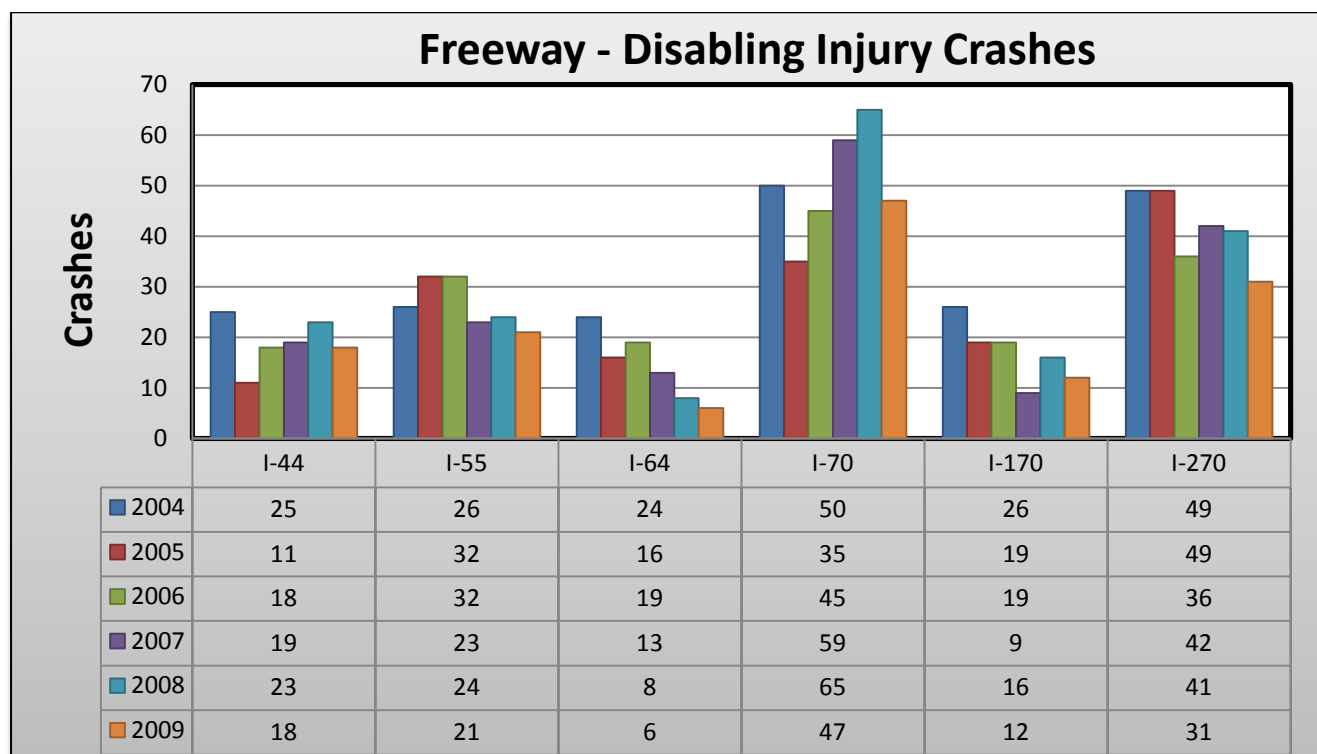


Figure S22 – Expressway Disabling Injury Crashes

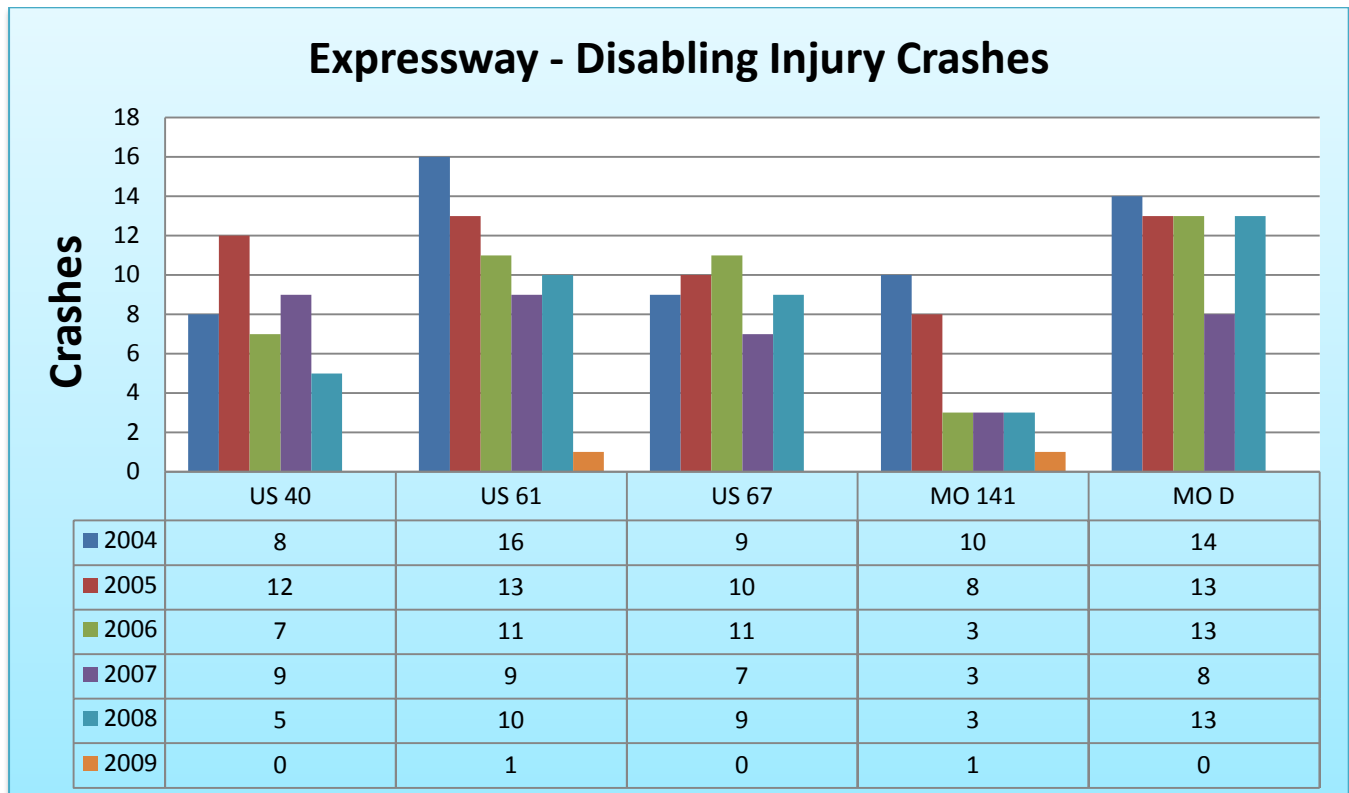


Figure S23 – Major Arterial Disabling Injury Crashes

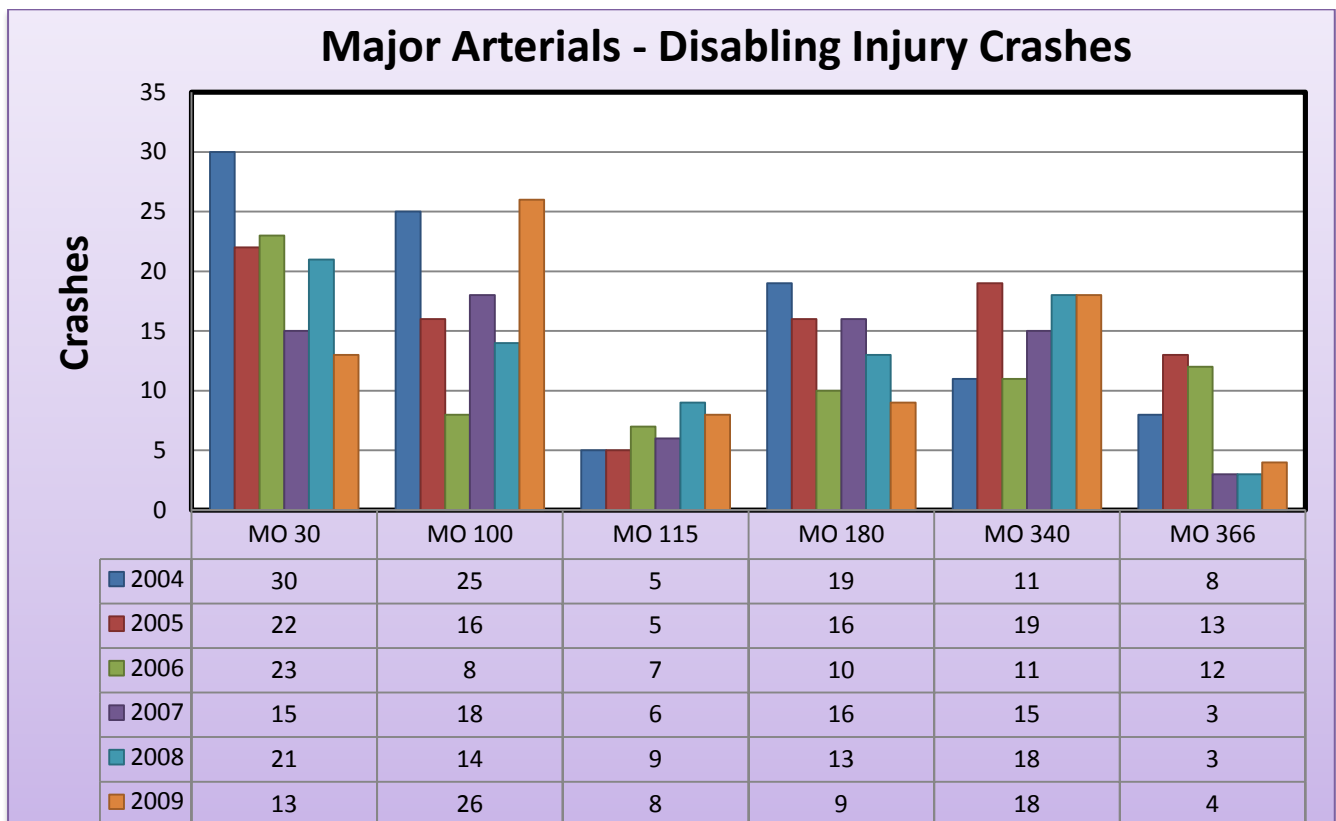


Table S11 All Minor Injury Crashes

Classification	Route	2004	2005	2006	2007	2008	2009	Average
Freeway	I-44	247	234	226	238	256	186	231
Freeway	I-55	251	220	229	213	227	208	225
Freeway	I-64	379	407	326	276	151	103	274
Freeway	I-70	482	537	475	510	534	593	522
Freeway	I-170	195	193	184	162	162	119	169
Freeway	I-270	415	514	530	497	474	381	469
	All	1,969	2,105	1,970	1,896	1,804	1,590	1,889
Expressway	US 40	134	156	150	112	81	106	123
Expressway	US 61	187	162	164	185	159	163	170
Expressway	US 67	116	94	87	93	83	82	93
Expressway	MO 141	125	109	104	113	84	101	106
Expressway	MO D	146	145	130	148	126	90	131
	All	708	666	635	651	533	542	623
Major Arterial	MO 30	265	296	250	240	222	207	247
Major Arterial	MO 100	222	214	205	190	198	231	210
Major Arterial	MO 115	93	98	85	98	97	93	94
Major Arterial	MO 180	199	220	182	176	169	182	188
Major Arterial	MO 340	218	205	204	221	219	176	207
Major Arterial	MO 366	132	165	147	137	125	127	139
	All	1,129	1,198	1,073	1,062	1,030	1,016	1,085
Combine Totals		3,806	3,969	3,678	3,609	3,367	3,148	3,596

Figure S24 – Freeway Minor Injury Crashes

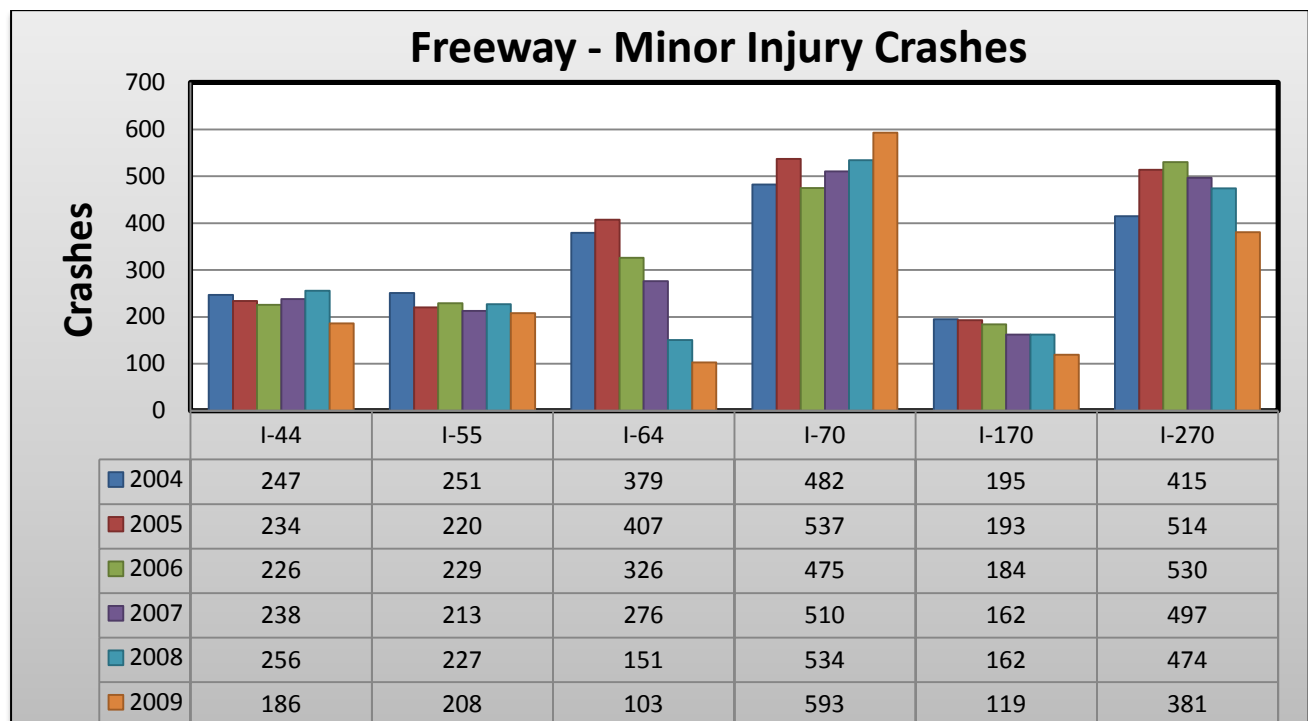


Figure S25 – Expressway Minor Injury Crashes

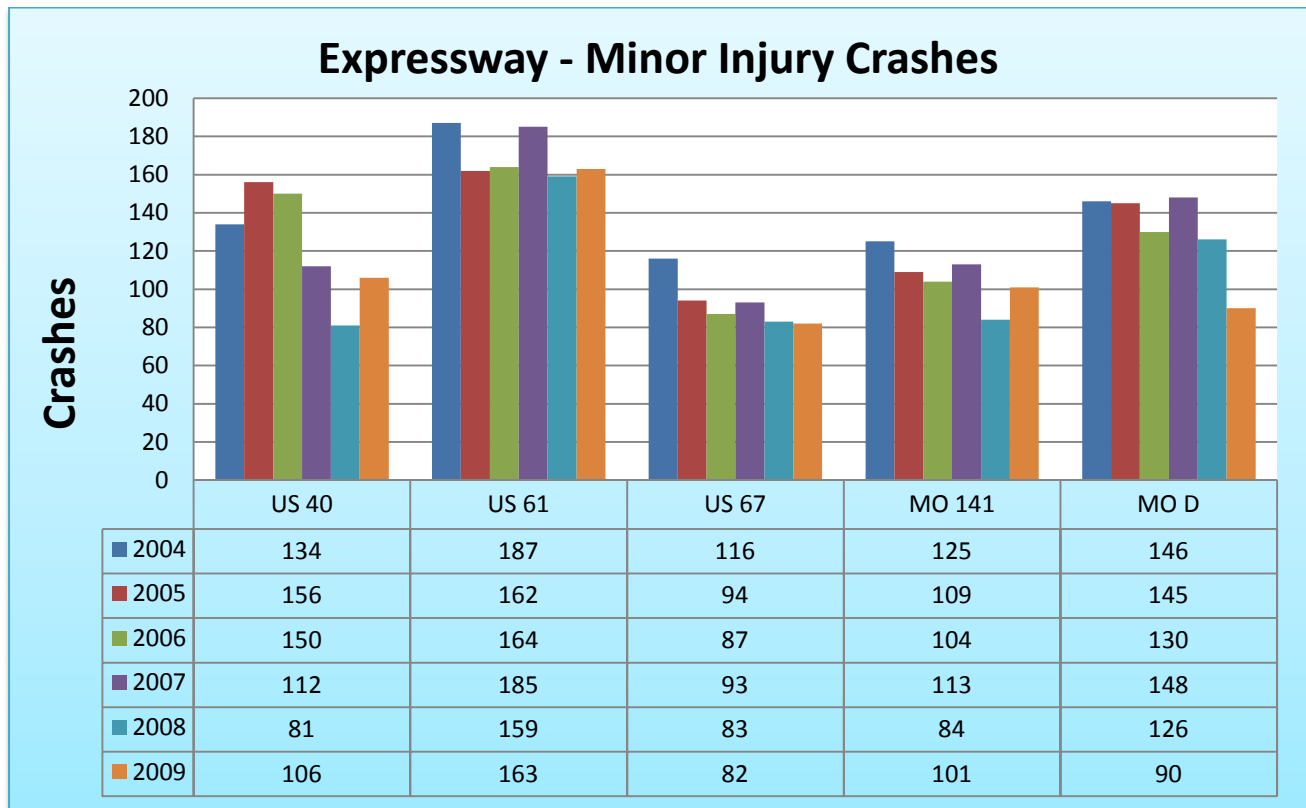


Figure S26 – Major Arterial Minor Injury Crashes

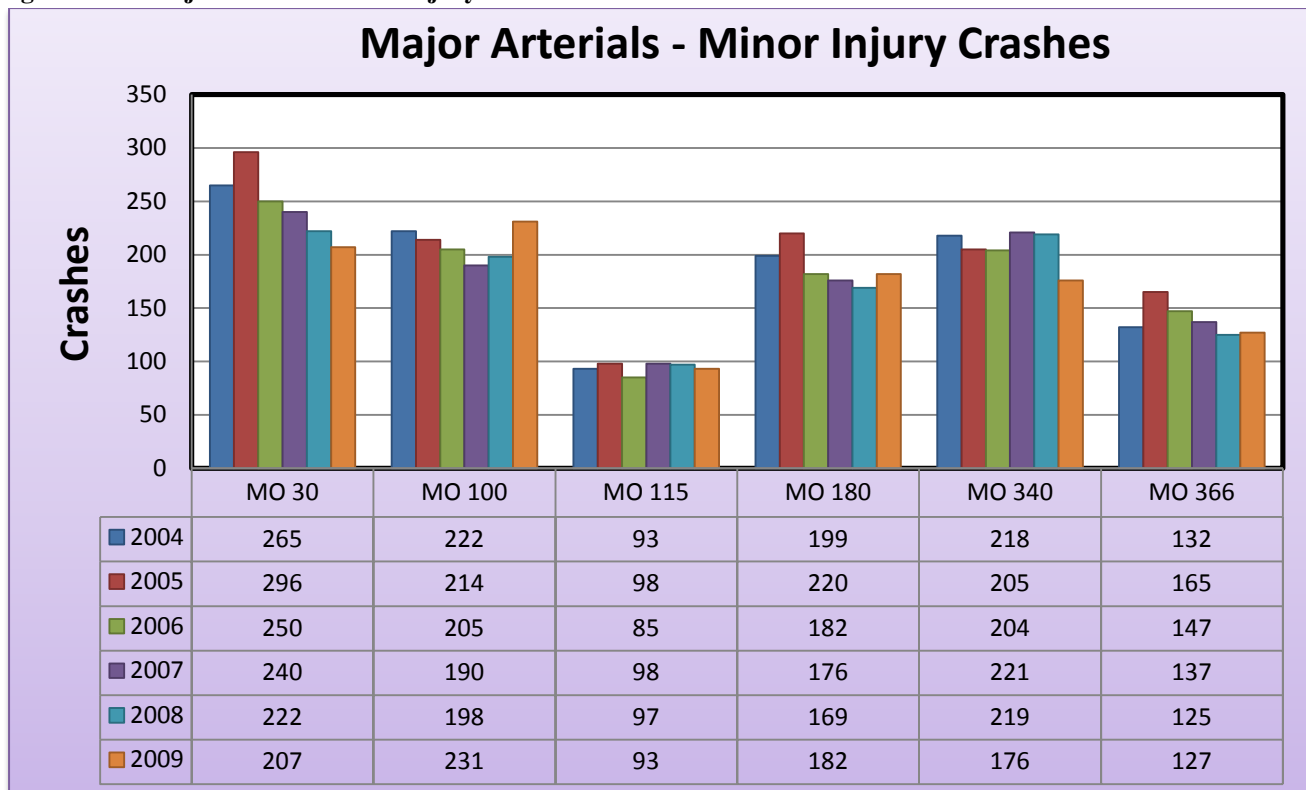


Table S12 All Property Damage Only Crashes

Classification	Route	2004	2005	2006	2007	2008	2009	Average
Freeway	I-44	823	836	813	814	849	677	802
Freeway	I-55	677	701	706	712	742	658	699
Freeway	I-64	1,215	1,183	1,144	913	558	301	886
Freeway	I-70	1,373	1,320	1,377	1,421	1,464	1,579	1,422
Freeway	I-170	680	555	625	633	592	429	586
Freeway	I-270	1,633	1,630	1,732	1,744	1,568	1,393	1,617
	All	6,401	6,225	6,397	6,237	5,773	5,037	6,012
Expressway	US 40	345	368	395	407	257	362	356
Expressway	US 61	650	652	643	597	592	547	614
Expressway	US 67	357	292	295	267	251	306	295
Expressway	MO 141	368	448	397	472	417	521	437
Expressway	MO D	566	523	489	534	557	367	506
	All	2,286	2,283	2,219	2,277	2,074	2,103	2,207
Major Arterial	MO 30	998	971	773	790	691	805	838
Major Arterial	MO 100	932	855	806	878	934	938	891
Major Arterial	MO 115	356	328	289	266	281	312	305
Major Arterial	MO 180	660	585	528	496	493	461	537
Major Arterial	MO 340	839	714	845	822	766	685	779
Major Arterial	MO 366	515	467	492	377	398	393	440
	All	4,300	3,920	3,733	3,629	3,563	3,594	3,790
Combine Totals		12,987	12,428	12,349	12,143	11,410	10,734	12,009

Figure S27 – Freeway Property Damage Only Crashes

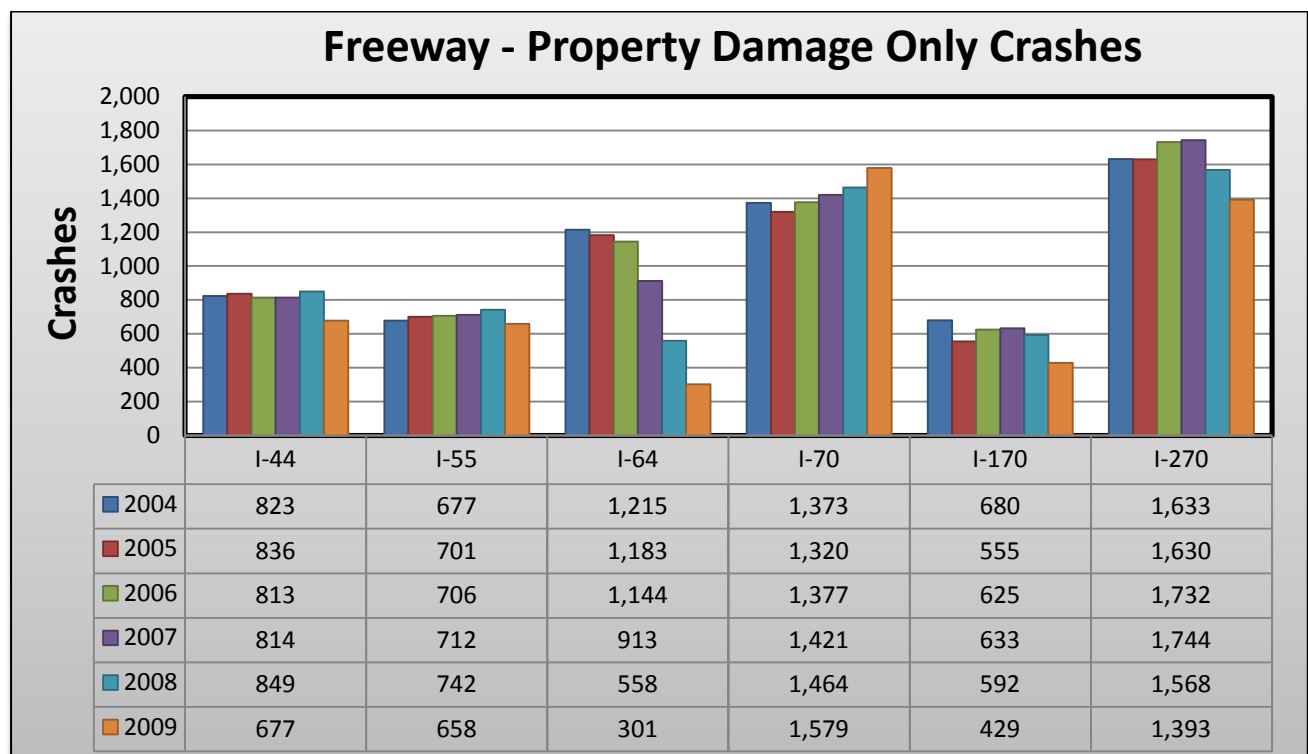


Figure S28 – Expressway Property Damage Only Crashes

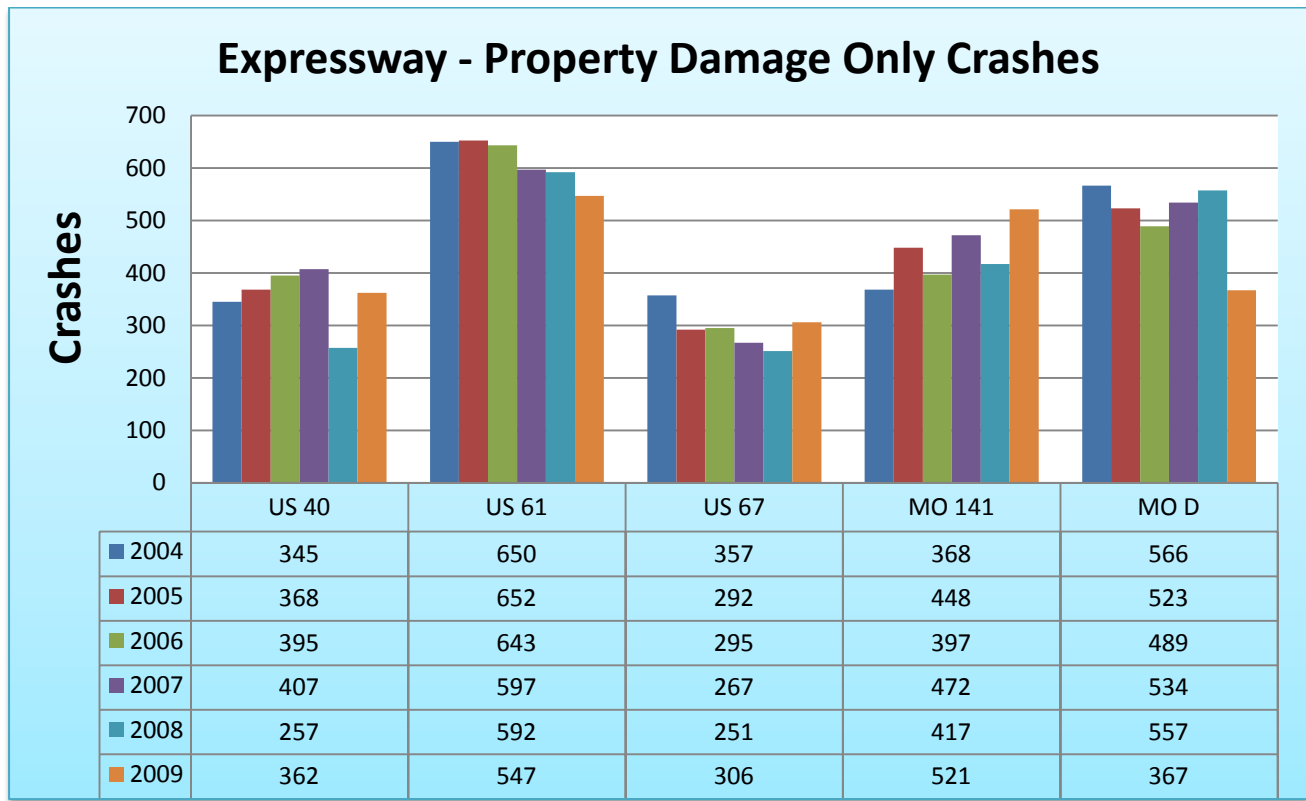


Figure S29 – Major Arterial Property Damage Only Crashes

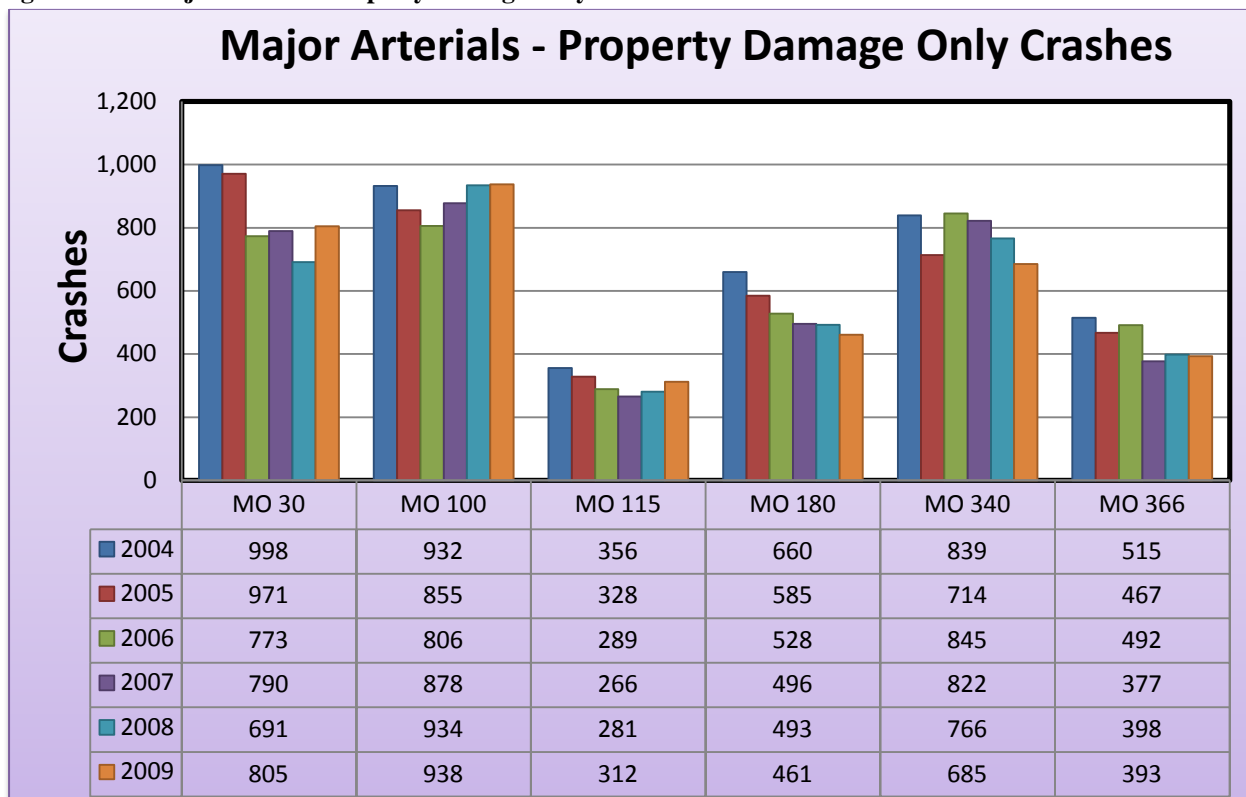


EXHIBIT CRASH RATE ANALYSIS

Table S13 All Crash Rates by Year (2004 through 2009)

Classification	Route	2004	2005	2006	2007	2008	2009	Average
Freeway	I-44	142	139	134	135	137	103	132
Freeway	I-55	158	157	149	144	152	144	151
Freeway	I-64	225	224	206	168	102	57	164
Freeway	I-70	182	179	189	196	203	210	193
Freeway	I-170	223	190	203	195	188	139	189
Freeway	I-270	142	149	152	150	138	117	141
Expressway	US 40	89	98	103	99	66	92	91
Expressway	US 61	425	423	402	388	382	401	403
Expressway	US 67	516	432	488	441	429	494	467
Expressway	MO 141	371	428	375	438	381	437	405
Expressway	MO D	398	380	353	384	397	254	361
Major Arterial	MO 30	574	584	468	470	434	477	501
Major Arterial	MO 100	413	389	370	395	426	435	405
Major Arterial	MO 115	426	482	431	417	444	511	452
Major Arterial	MO 180	448	434	429	410	411	404	423
Major Arterial	MO 340	446	400	477	475	453	369	437
Major Arterial	MO 366	443	438	444	353	366	364	401

Figure S30 – Freeway All Crash Rates

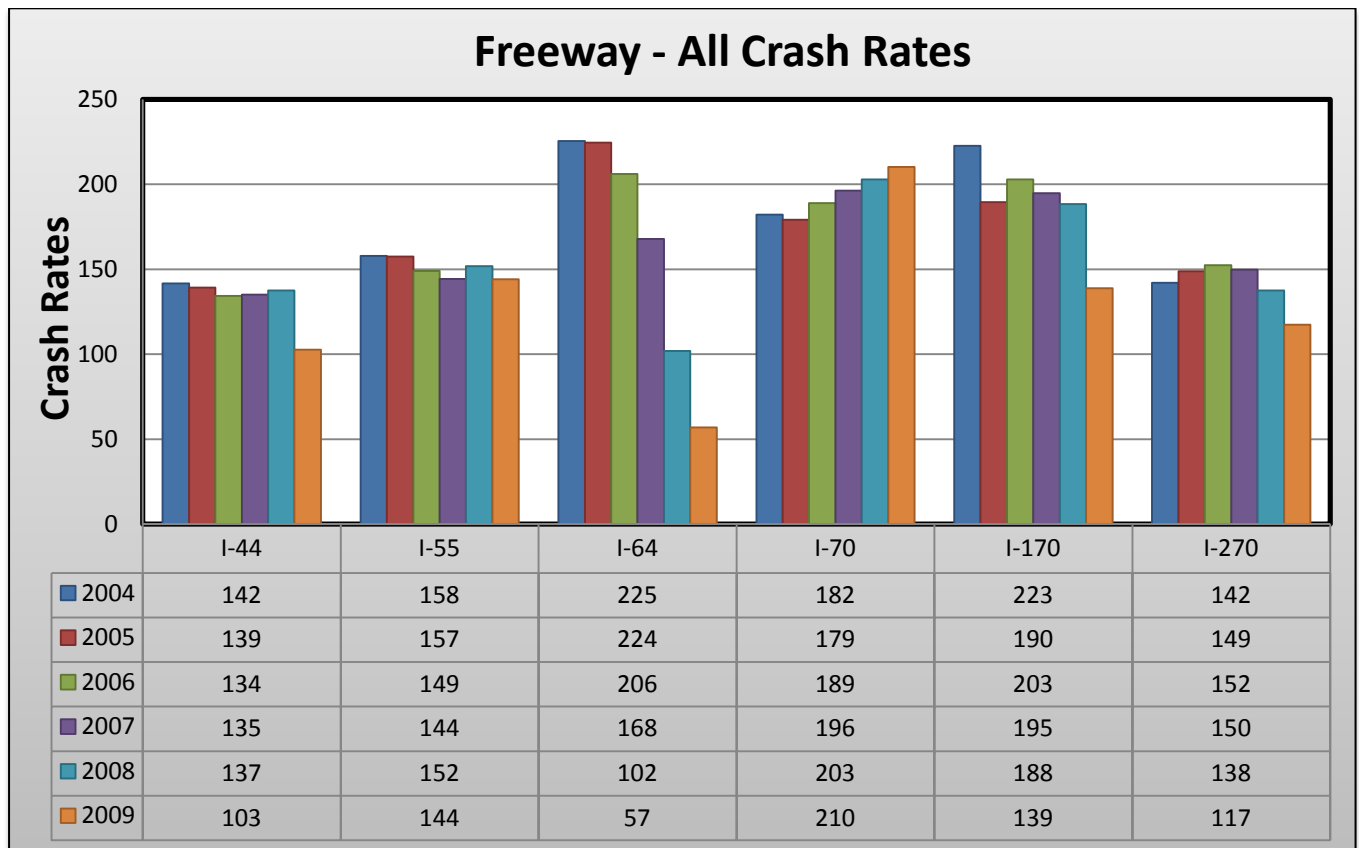


Figure S31 – Expressway All Crash Rates

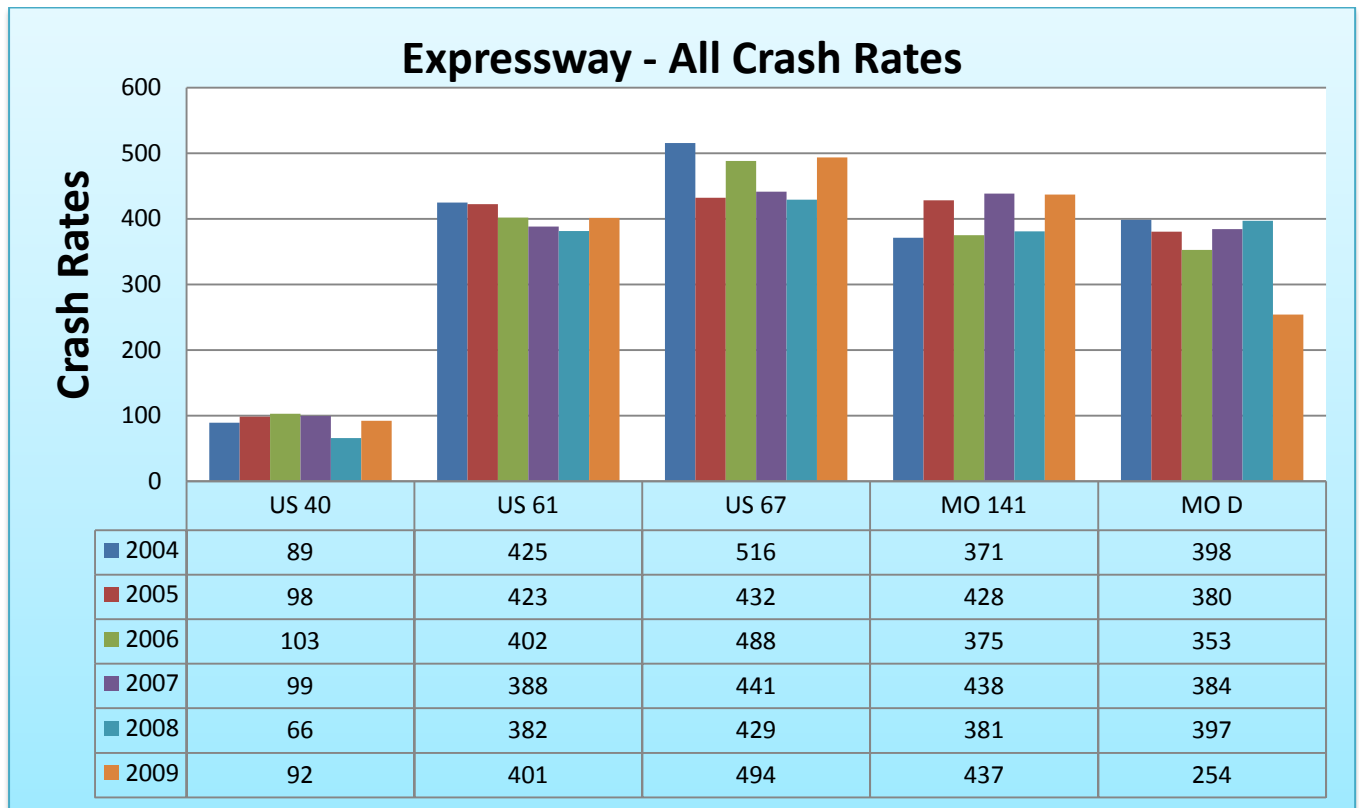


Figure S32 – Major Arterial All Crash Rates

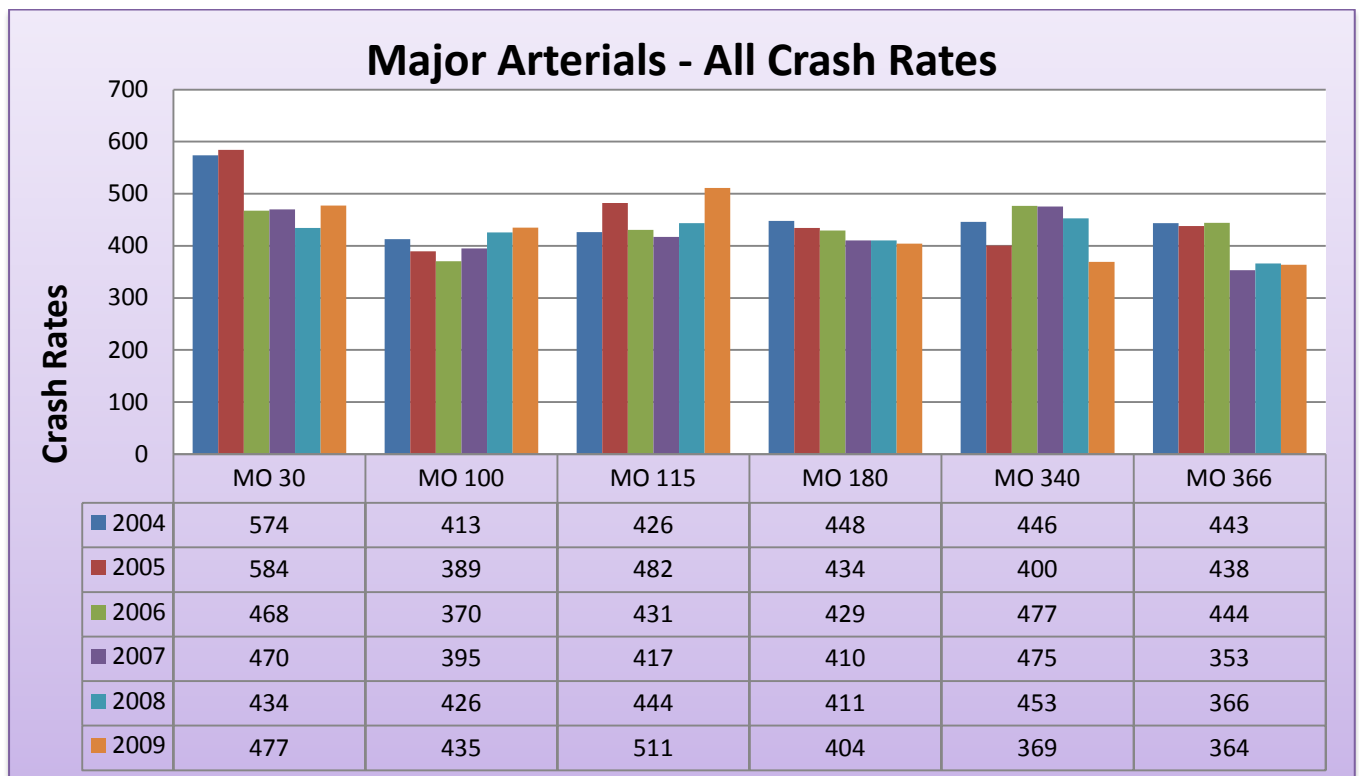


Table S14 Fatal Crash Rates

Classification	Route	2004	2005	2006	2007	2008	2009	Average
Freeway	I-44	0.6	0.4	1.0	0.8	0.4	0.1	0.5
Freeway	I-55	1.6	1.1	1.1	0.6	0.8	1.1	1.1
Freeway	I-64	0.8	0.6	0.7	0.4	0.1	0.0	0.4
Freeway	I-70	0.2	1.0	0.5	0.6	1.5	0.8	0.7
Freeway	I-170	1.2	0.7	0.5	0.2	1.5	0.2	0.7
Freeway	I-270	0.4	0.5	0.3	0.3	0.0	0.1	0.3
Expressway	US 40	0.4	0.0	0.2	0.2	0.2	0.0	0.2
Expressway	US 61	0.0	0.5	0.5	0.0	0.0	0.5	0.3
Expressway	US 67	2.1	0.0	3.7	1.2	3.7	0.0	1.8
Expressway	MO 141	0.0	0.8	0.0	0.7	0.0	0.7	0.4
Expressway	MO D	1.1	0.6	2.2	0.0	1.7	0.0	0.9
Major Arterial	MO 30	2.2	3.6	1.3	1.3	0.9	0.0	1.6
Major Arterial	MO 100	0.0	0.4	0.0	0.4	0.0	0.4	0.2
Major Arterial	MO 115	0.9	1.1	1.1	0.0	0.0	0.0	0.5
Major Arterial	MO 180	0.5	0.5	0.6	0.6	0.0	1.3	0.6
Major Arterial	MO 340	1.2	0.4	0.4	0.4	0.0	0.0	0.4
Major Arterial	MO 366	0.0	0.0	0.7	1.4	0.0	1.4	0.6

Figure S33 – Freeway Fatal Crash Rates

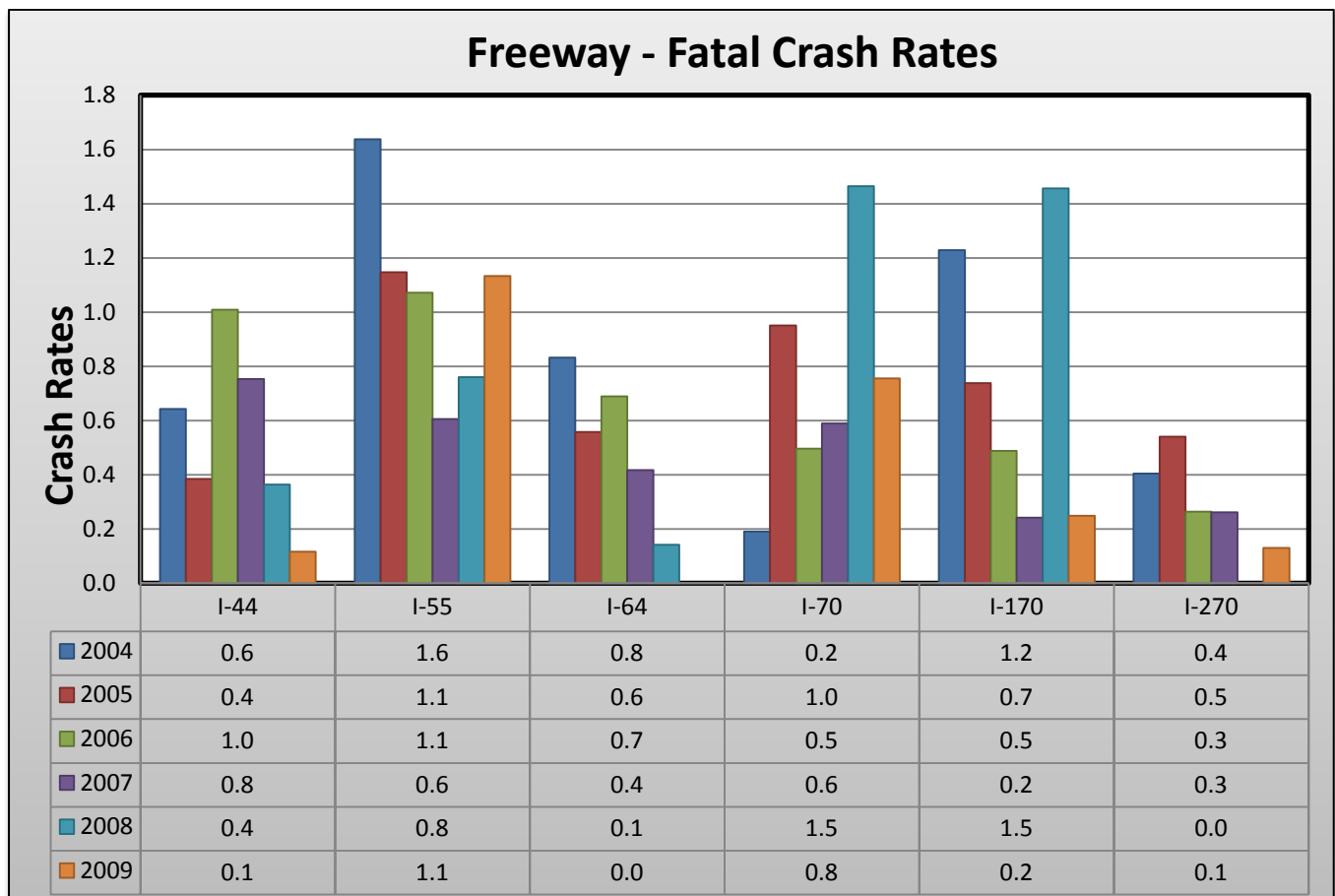


Figure S34 – Expressway Fatal Crash Rates

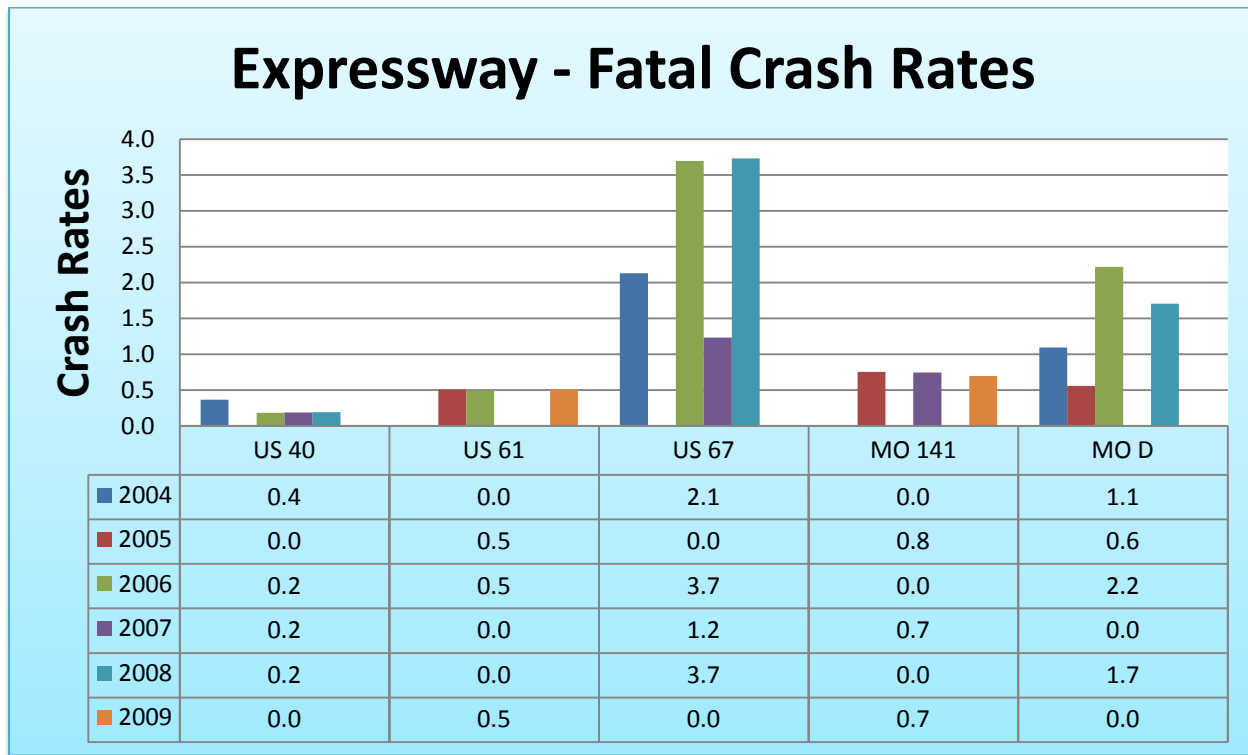


Figure S35 – Major Arterial Fatal Crash Rates

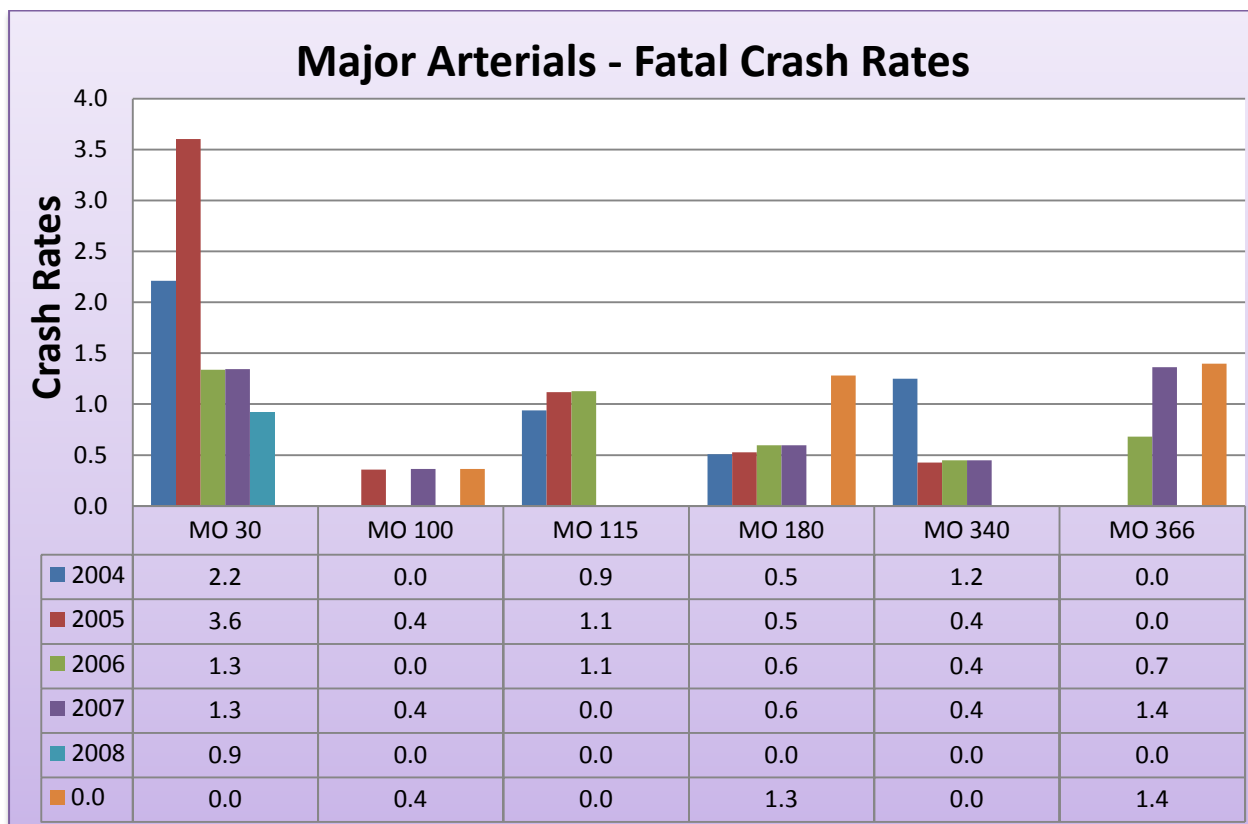


Table S15 Disabling Injury Crash Rates

Classification	Route	2004	2005	2006	2007	2008	2009	Average
Freeway	I-44	3.22	1.41	2.26	2.38	2.79	2.10	2.36
Freeway	I-55	4.26	5.23	4.88	3.48	3.65	3.39	4.15
Freeway	I-64	3.33	2.22	2.61	1.81	1.14	0.84	1.99
Freeway	I-70	4.78	3.32	4.46	5.78	6.35	4.43	4.85
Freeway	I-170	6.39	4.66	4.63	2.17	3.88	2.98	4.12
Freeway	I-270	3.31	3.30	2.38	2.74	2.71	2.01	2.74
Expressway	US 40	1.46	2.20	1.30	1.69	0.96	0.79	1.40
Expressway	US 61	7.97	6.62	5.38	4.40	5.01	4.11	5.58
Expressway	US 67	9.59	10.88	13.52	8.60	11.20	7.55	10.22
Expressway	MO 141	7.38	6.03	2.23	2.23	2.27	4.19	4.06
Expressway	MO D	7.66	7.23	7.19	4.44	7.38	5.48	6.56
Major Arterial	MO 30	13.26	9.88	10.22	6.71	9.69	6.04	9.30
Major Arterial	MO 100	8.76	5.72	2.90	6.53	5.20	9.42	6.42
Major Arterial	MO 115	4.69	5.57	7.87	6.75	10.37	9.92	7.53
Major Arterial	MO 180	9.68	8.43	5.94	9.50	7.91	5.76	7.87
Major Arterial	MO 340	4.58	8.08	4.93	6.72	8.12	7.53	6.66

Figure S36 – Freeway Disabling Injury Crash Rates

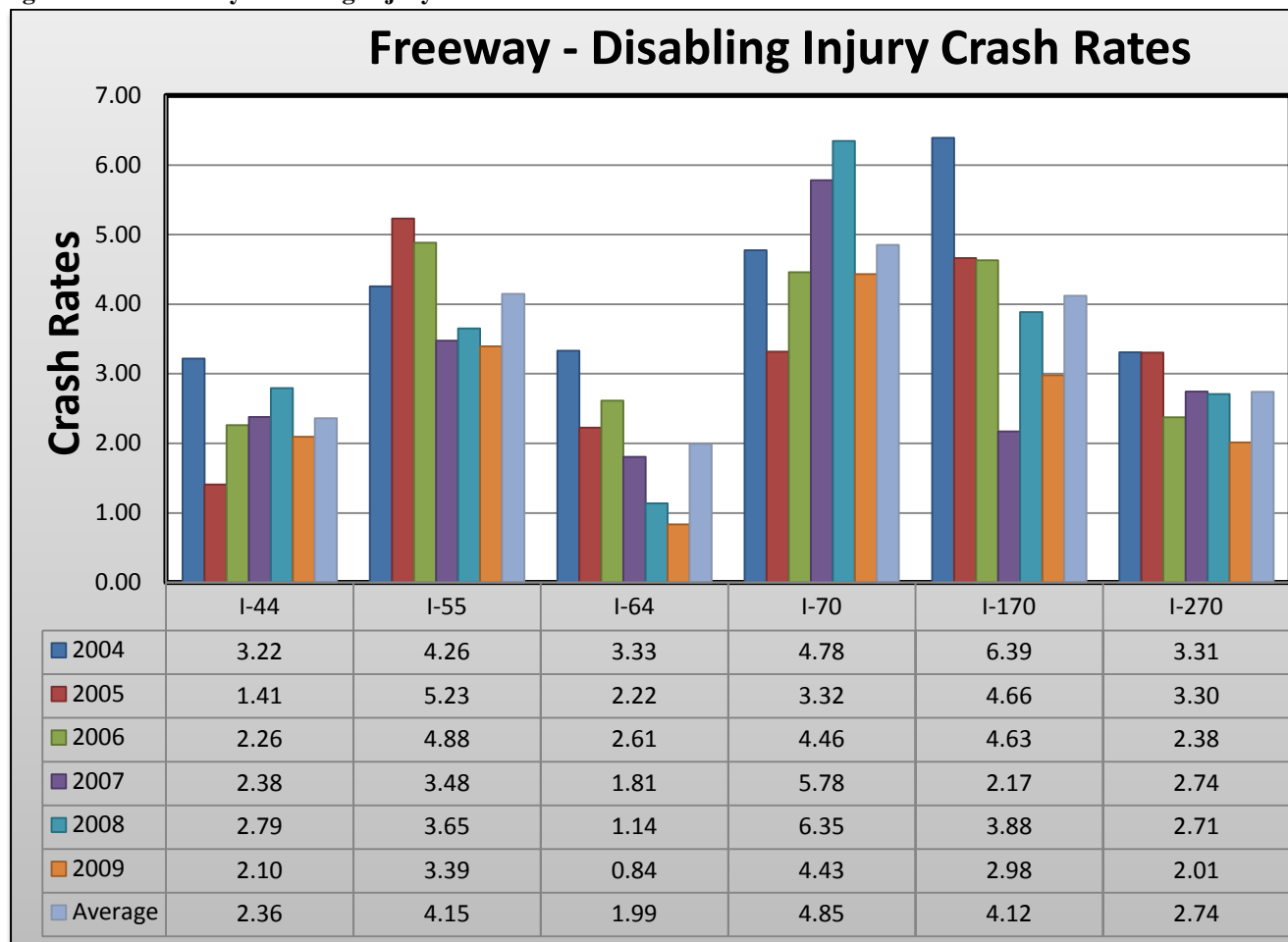


Figure S37 – Expressway Disabling Injury Crash Rates

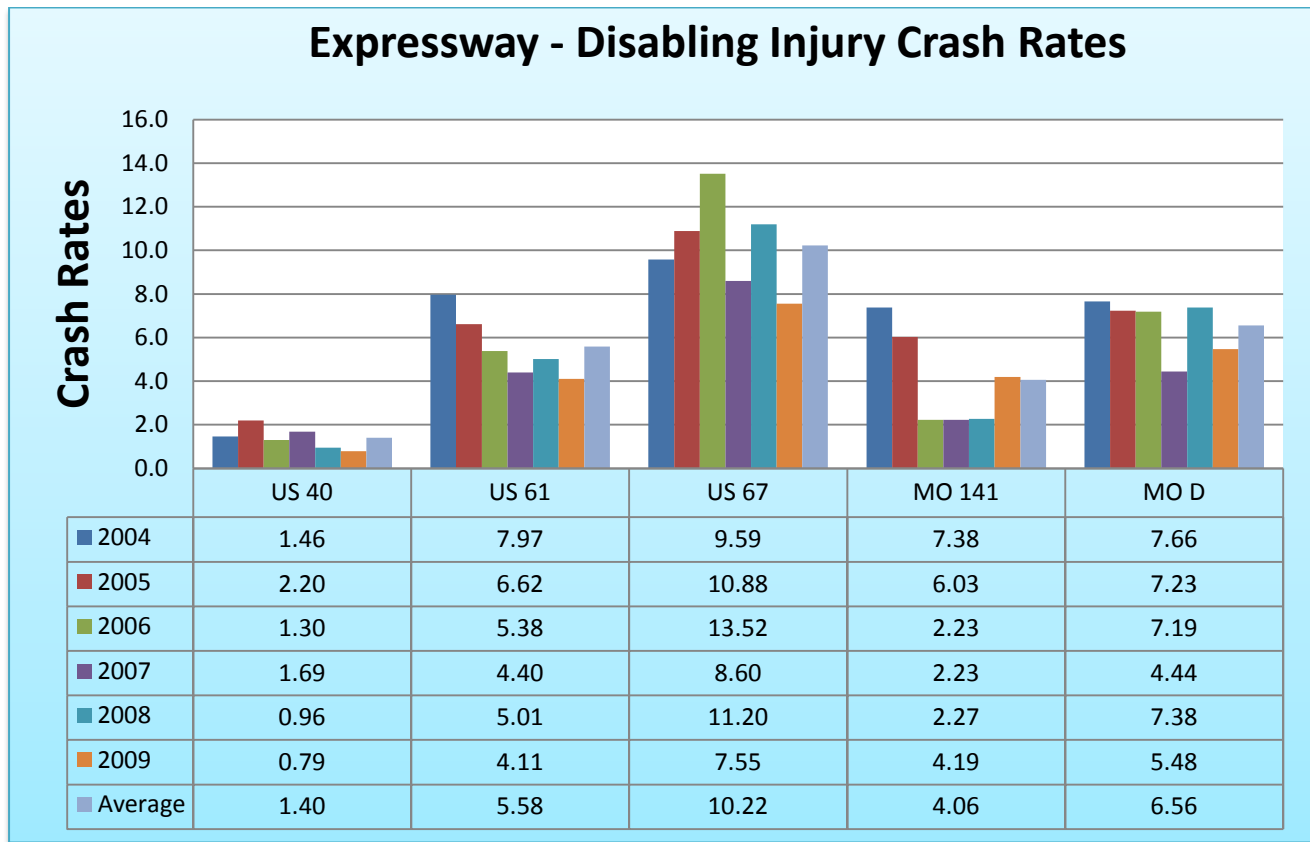


Figure S38 – Major Arterial Disabling Injury Crash Rates

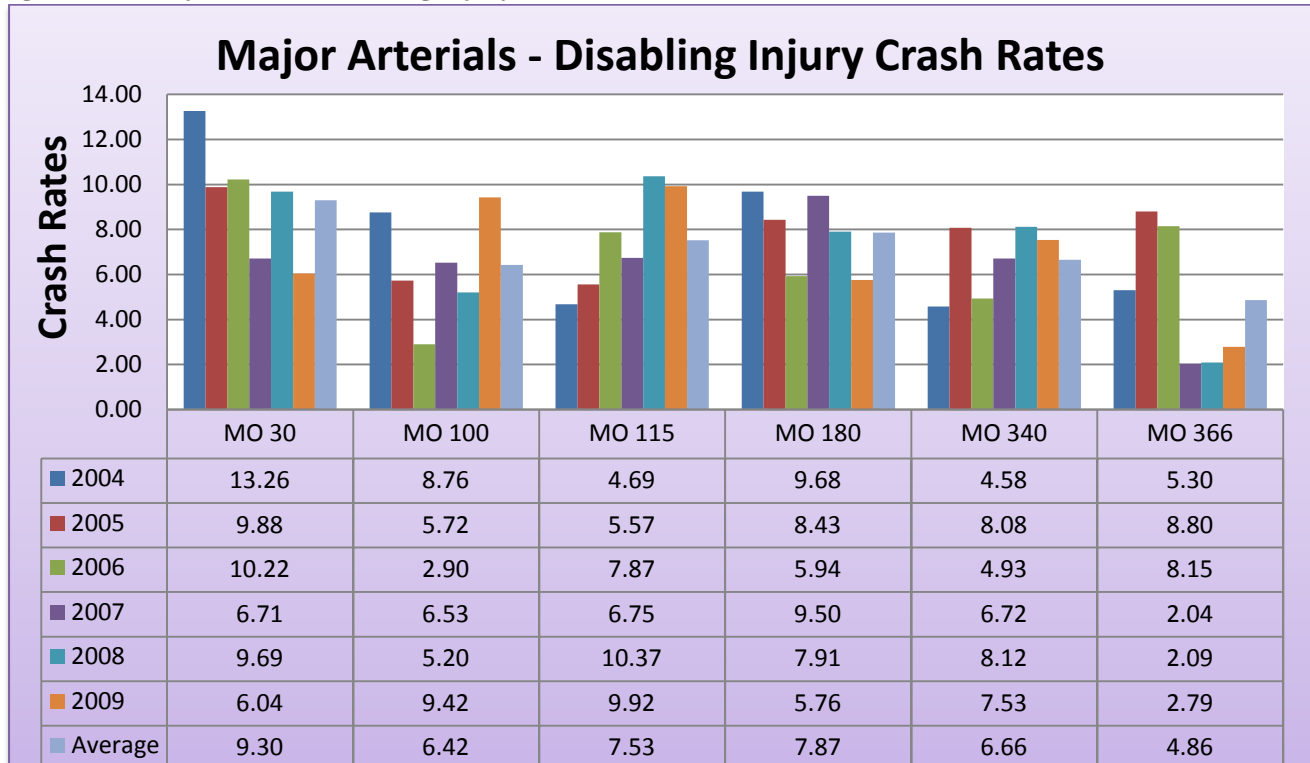


Table S16 Minor Injury Crash Rates

Classification	Route	2004	2005	2006	2007	2008	2009	Average
Freeway	I-44	31.79	29.97	28.42	29.78	31.11	21.65	29
Freeway	I-55	41.10	35.98	34.96	32.19	34.52	33.61	35
Freeway	I-64	52.60	56.59	44.85	38.35	21.48	14.34	38
Freeway	I-70	46.05	50.94	47.05	49.99	52.13	55.91	50
Freeway	I-170	47.92	47.37	44.84	39.08	39.33	29.53	41
Freeway	I-270	28.02	34.66	34.98	32.47	31.29	24.73	31
Expressway	US 40	24.49	28.57	27.85	20.99	15.47	20.88	23
Expressway	US 61	93.15	82.44	80.25	90.52	79.72	83.74	85
Expressway	US 67	123.56	102.30	106.93	114.30	103.25	103.25	109
Expressway	MO 141	92.26	82.19	77.18	83.86	63.64	70.61	78
Expressway	MO D	79.88	80.65	71.86	82.17	71.54	49.30	73
Major Arterial	MO 30	117.16	132.91	111.14	107.32	102.39	96.16	111
Major Arterial	MO 100	77.75	76.57	74.32	68.88	73.56	83.73	76
Major Arterial	MO 115	87.15	109.10	95.58	110.20	111.77	115.34	105
Major Arterial	MO 180	101.38	115.88	108.03	104.47	102.79	116.40	108
Major Arterial	MO 340	90.74	87.14	91.39	98.94	98.83	73.67	90
Major Arterial	MO 366	87.45	111.66	99.82	93.03	86.98	88.47	95

Figure S39 – Freeway Minor Injury Crash Rates

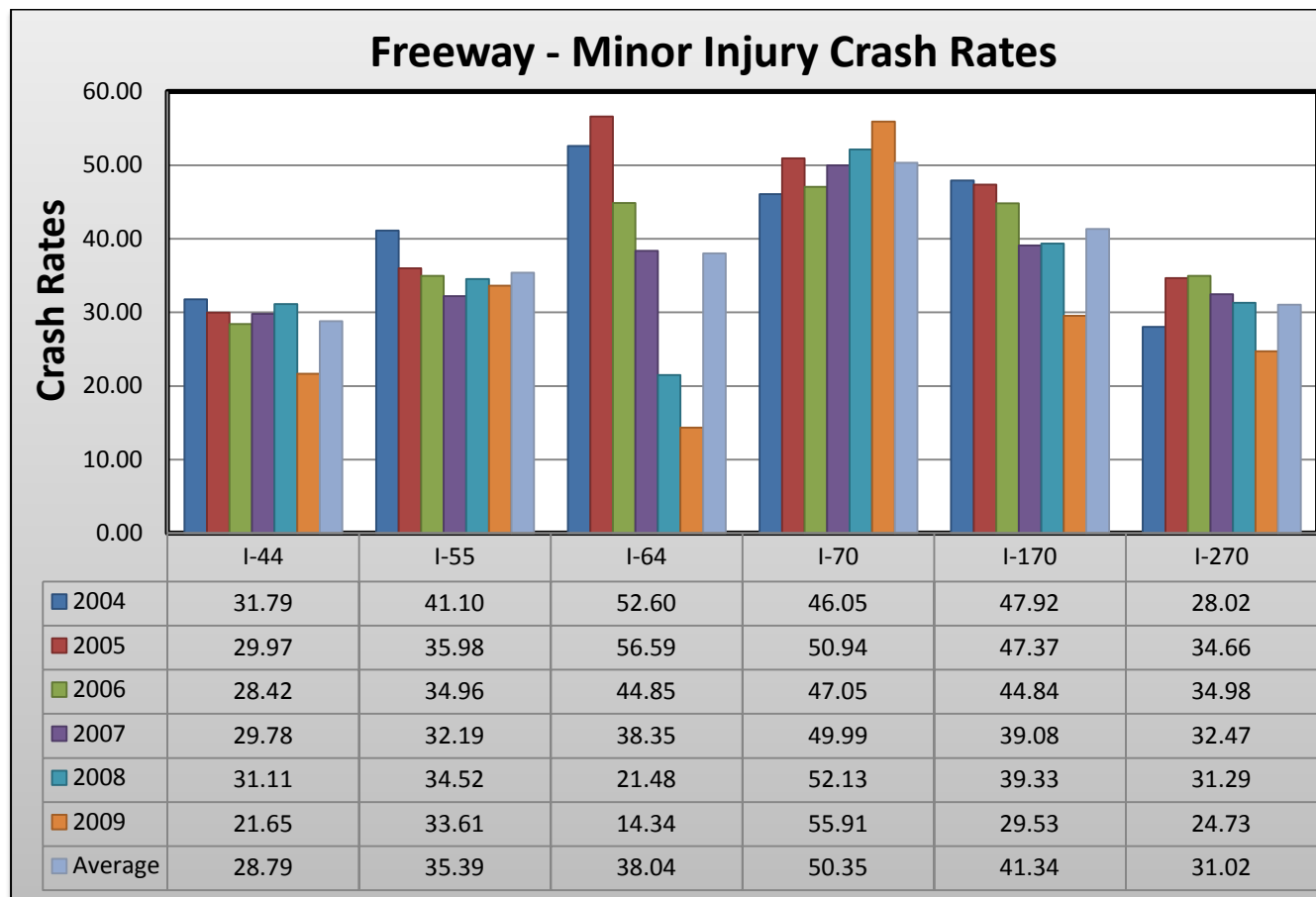


Figure S40 – Expressway Minor Injury Crash Rates

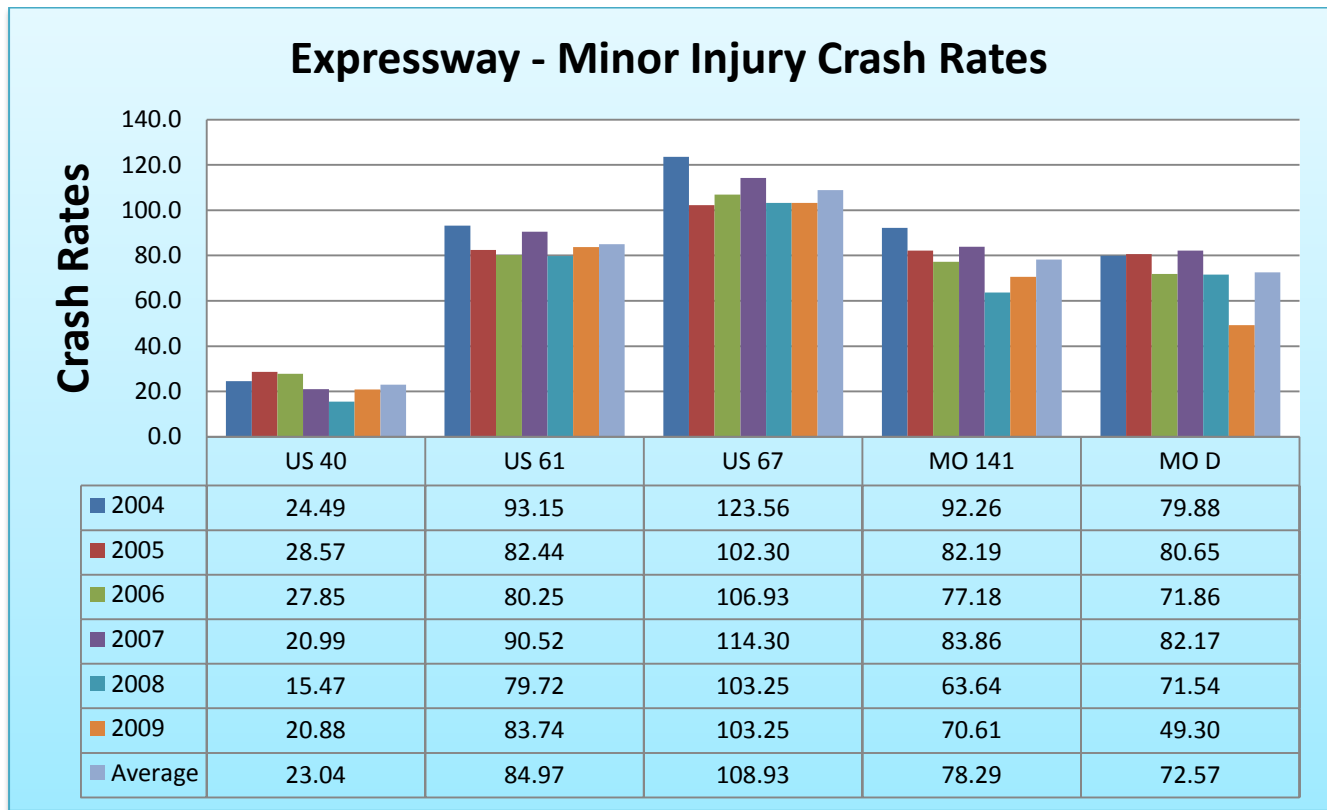


Figure S41 – Major Arterial Minor Injury Crash Rates

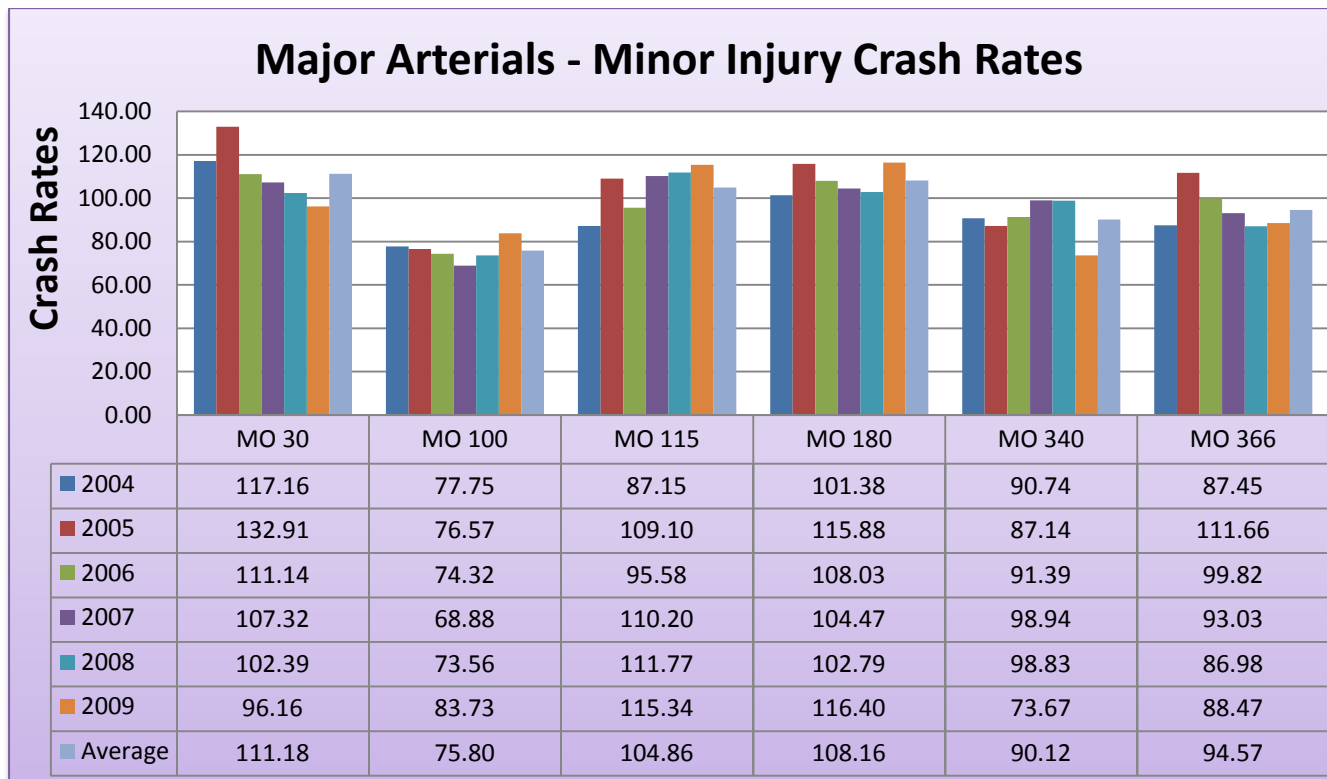


Table S17 Property Damage Only Crash Rates

Classification	Route	2004	2005	2006	2007	2008	2009	Average
Freeway	I-44	105.92	107.09	102.25	101.87	103.17	78.82	99.85
Freeway	I-55	110.84	114.64	107.77	107.61	112.84	106.31	110.00
Freeway	I-64	168.64	164.49	157.38	126.86	79.39	41.91	123.11
Freeway	I-70	131.18	125.22	136.40	139.29	142.91	148.88	137.31
Freeway	I-170	167.09	136.22	152.30	152.72	143.72	106.45	143.08
Freeway	I-270	110.24	109.91	114.30	113.95	103.51	90.42	107.05
Expressway	US 40	63.06	67.40	73.33	76.29	49.10	71.30	66.75
Expressway	US 61	323.77	331.80	314.63	292.12	296.82	281.02	306.69
Expressway	US 67	380.27	317.77	362.57	328.16	312.25	385.29	347.72
Expressway	MO 141	271.61	337.79	294.62	350.27	315.91	364.25	322.41
Expressway	MO D	309.68	290.89	270.30	296.48	316.26	201.04	280.77
Major Arterial	MO 30	441.21	436.01	343.63	353.25	318.70	373.96	377.80
Major Arterial	MO 100	326.43	305.92	292.21	318.31	346.99	340.01	321.65
Major Arterial	MO 115	333.61	365.15	324.98	299.11	323.79	386.95	338.93
Major Arterial	MO 180	336.24	308.14	313.40	294.41	299.86	294.85	307.82
Major Arterial	MO 340	349.22	303.52	378.54	368.00	345.67	286.71	338.61
Major Arterial	MO 366	341.17	316.03	334.10	256.01	276.95	273.78	299.67

Figure S42 – Freeway Property Damage Only Crash Rates

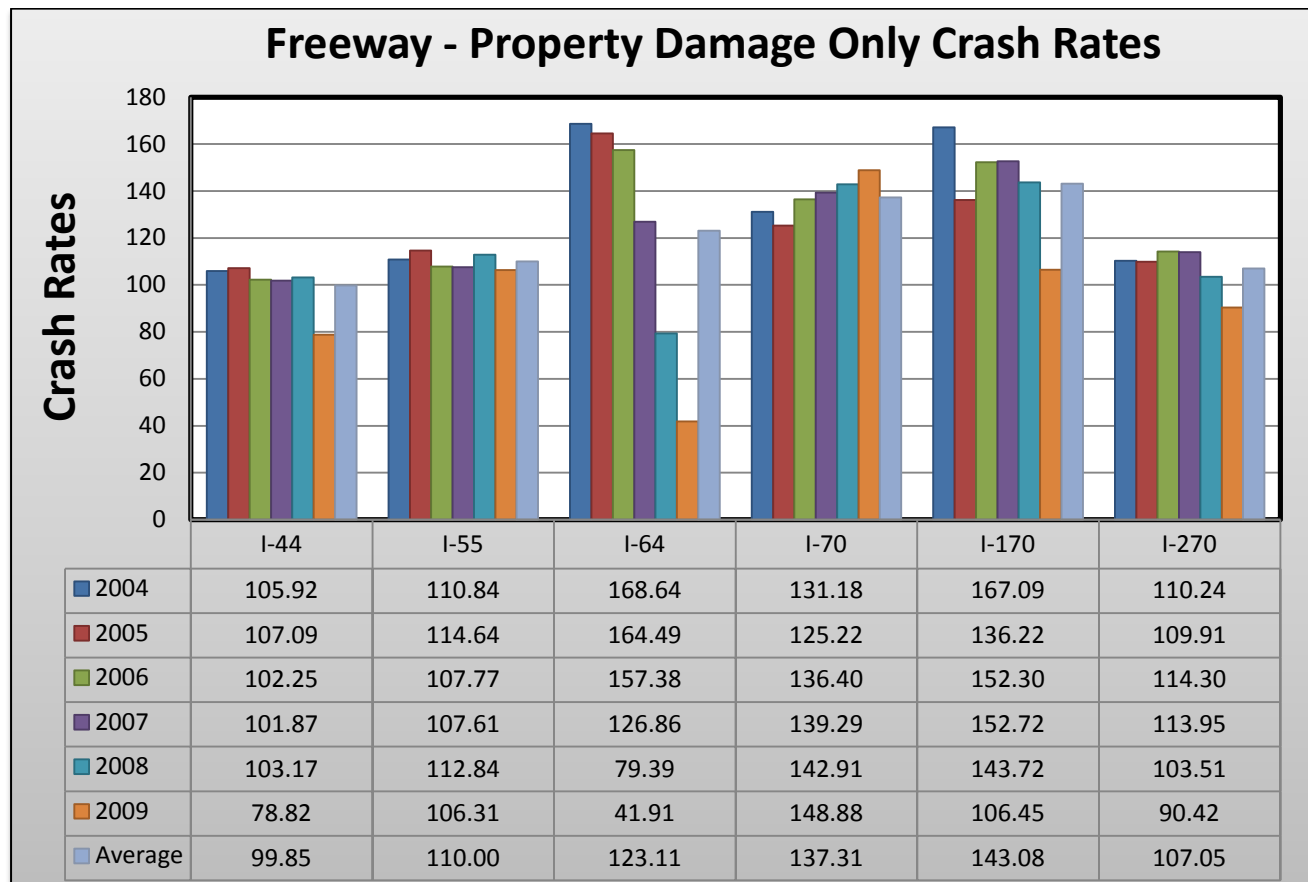


Figure S43 – Expressway Property Damage Only Crash Rates

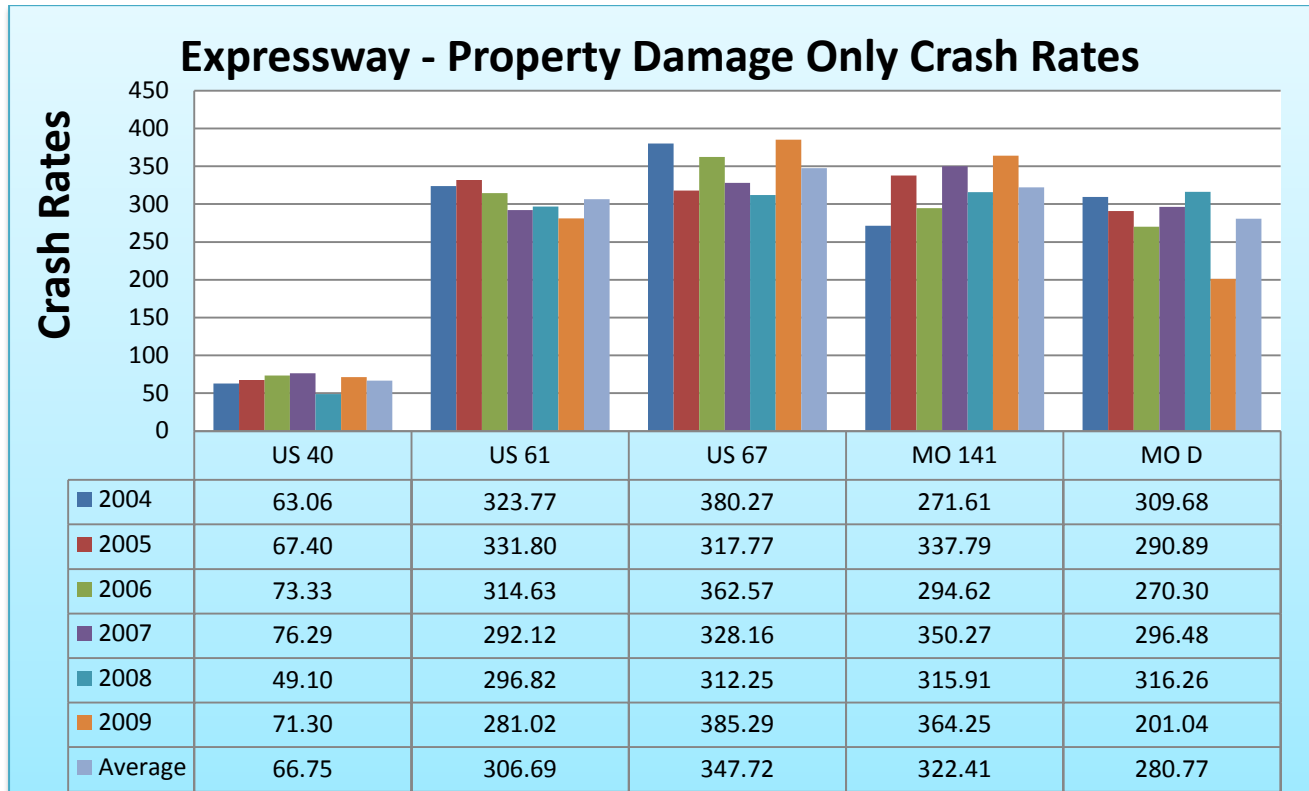


Figure S44 – Major Arterial Property Damage Only Crash Rates

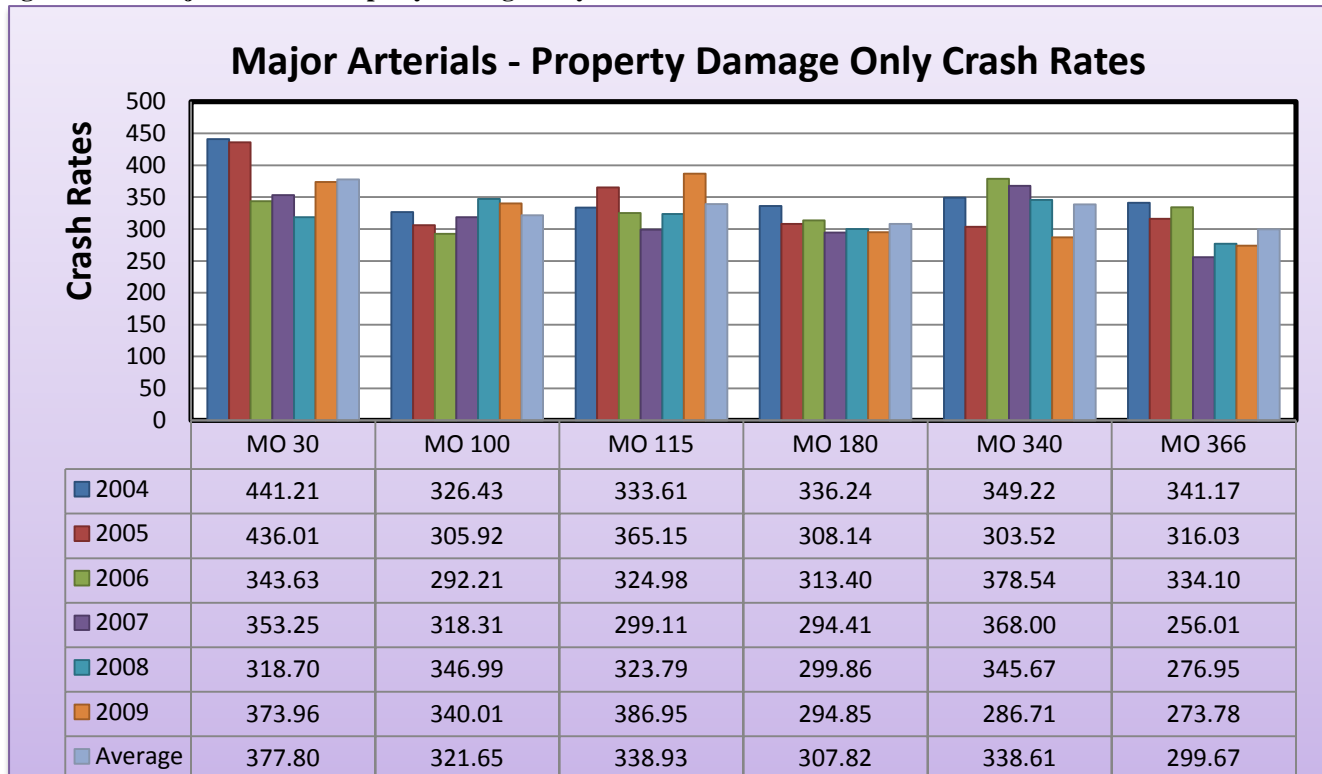


EXHIBIT CRASH TYPE ANALYSIS

Table S18 Rear-end Type Crashes

Classification	Route	2004	2005	2006	2007	2008	2009	Average
Freeway	I-44	472	462	461	478	433	347	442
Freeway	I-55	362	344	363	318	328	286	334
Freeway	I-64	971	844	800	595	308	197	619
Freeway	I-70	691	675	661	656	655	823	694
Freeway	I-170	455	389	466	472	362	296	407
Freeway	I-270	1,151	1,146	1,358	1,387	1,203	1,081	1,221
All	Average	4,102	3,860	4,109	3,906	3,289	3,030	3,716
Expressway	US 40	287	294	337	353	198	318	298
Expressway	US 61	442	418	408	391	401	381	407
Expressway	US 67	272	224	198	195	160	208	210
Expressway	MO 141	301	344	344	393	308	439	355
Expressway	MO D	363	373	334	364	352	189	329
	All	1,665	1,653	1,621	1,696	1,419	1,535	1,598
Major Arterial	MO 30	518	490	474	444	372	451	458
Major Arterial	MO 100	532	486	448	514	573	600	526
Major Arterial	MO 115	158	143	92	106	97	161	126
Major Arterial	MO 180	386	389	320	313	317	279	334
Major Arterial	MO 340	579	531	552	587	565	467	547
Major Arterial	MO 366	270	249	269	191	203	205	231
	All	2,443	2,288	2,155	2,155	2,127	2,163	2,222

Figure S45 – Freeway Rear-end Type Crashes

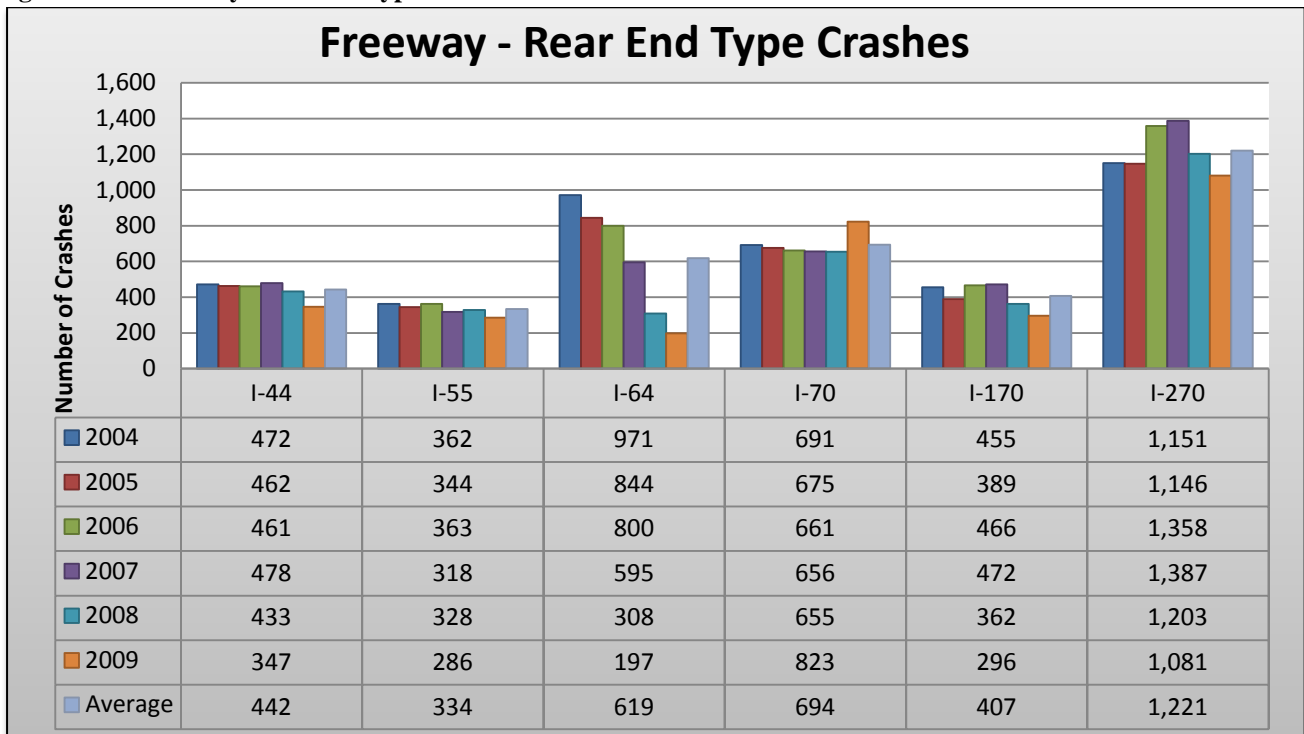


Figure S46 – Expressway Rear-end Type Crashes

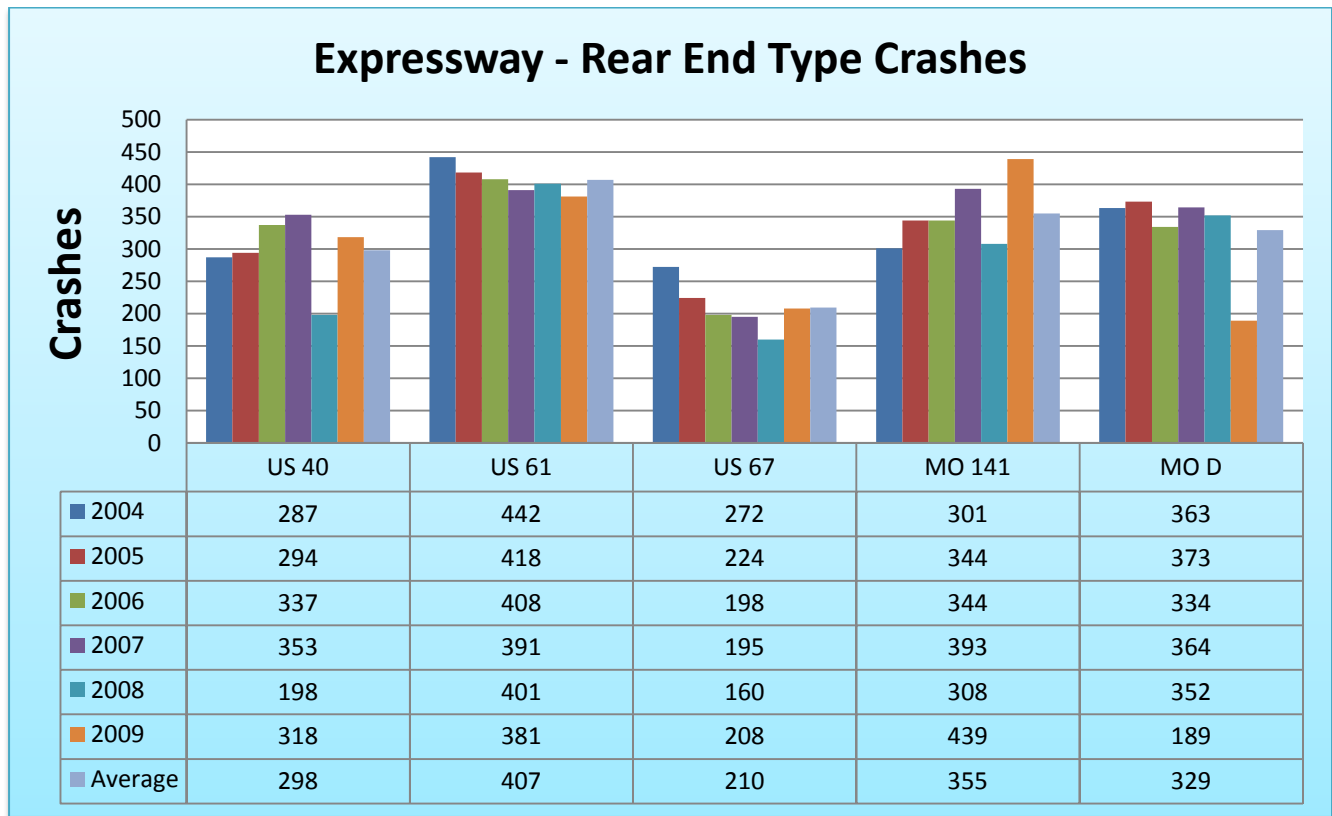


Figure S47 – Major Arterial Rear-end Crashes

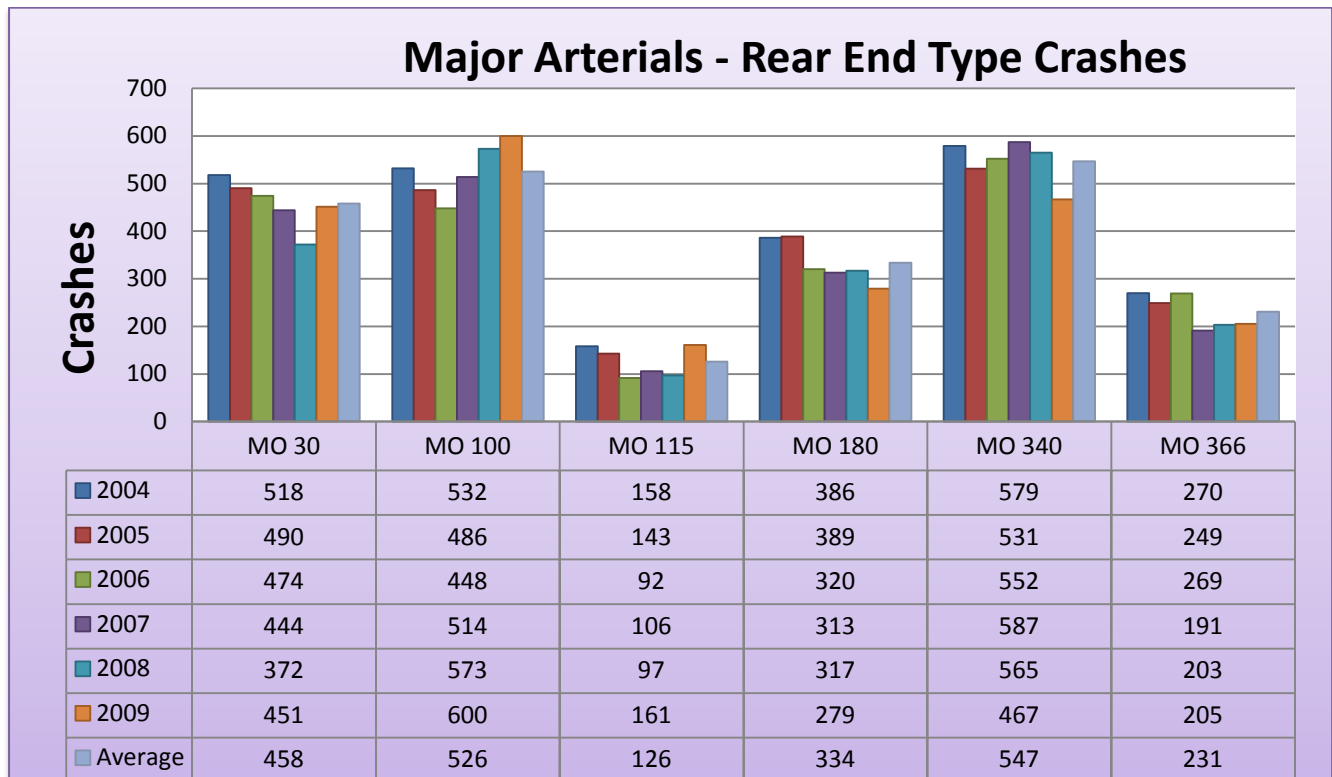


Table S19 Out of Control Type Crashes

Classification	Route	2004	2005	2006	2007	2008	2009	Average
Freeway	I-44	271	235	203	251	302	258	253
Freeway	I-55	249	226	223	275	316	325	269
Freeway	I-64	232	219	208	215	149	115	190
Freeway	I-70	524	528	490	623	720	793	613
Freeway	I-170	191	164	145	151	193	151	166
Freeway	I-270	299	383	286	330	323	298	320
	All	1,766	1,755	1,555	1,845	2,003	1,940	1,811
Expressway	US 40	88	90	70	53	54	60	69
Expressway	US 61	39	32	30	46	32	29	35
Expressway	US 67	32	34	33	34	51	37	37
Expressway	MO 141	43	53	31	44	62	55	48
Expressway	MO D	57	60	51	70	64	56	60
	All	259	269	215	247	263	237	248
Major Arterial	MO 30	78	74	61	78	82	82	76
Major Arterial	MO 100	69	72	50	54	47	66	60
Major Arterial	MO 115	24	32	45	33	43	36	36
Major Arterial	MO 180	36	44	48	58	46	45	46
Major Arterial	MO 340	33	40	59	61	60	50	51
Major Arterial	MO 366	37	45	42	35	40	34	39
	All	277	307	305	319	318	313	307

Figure S48 – Expressway Out of Control Crashes

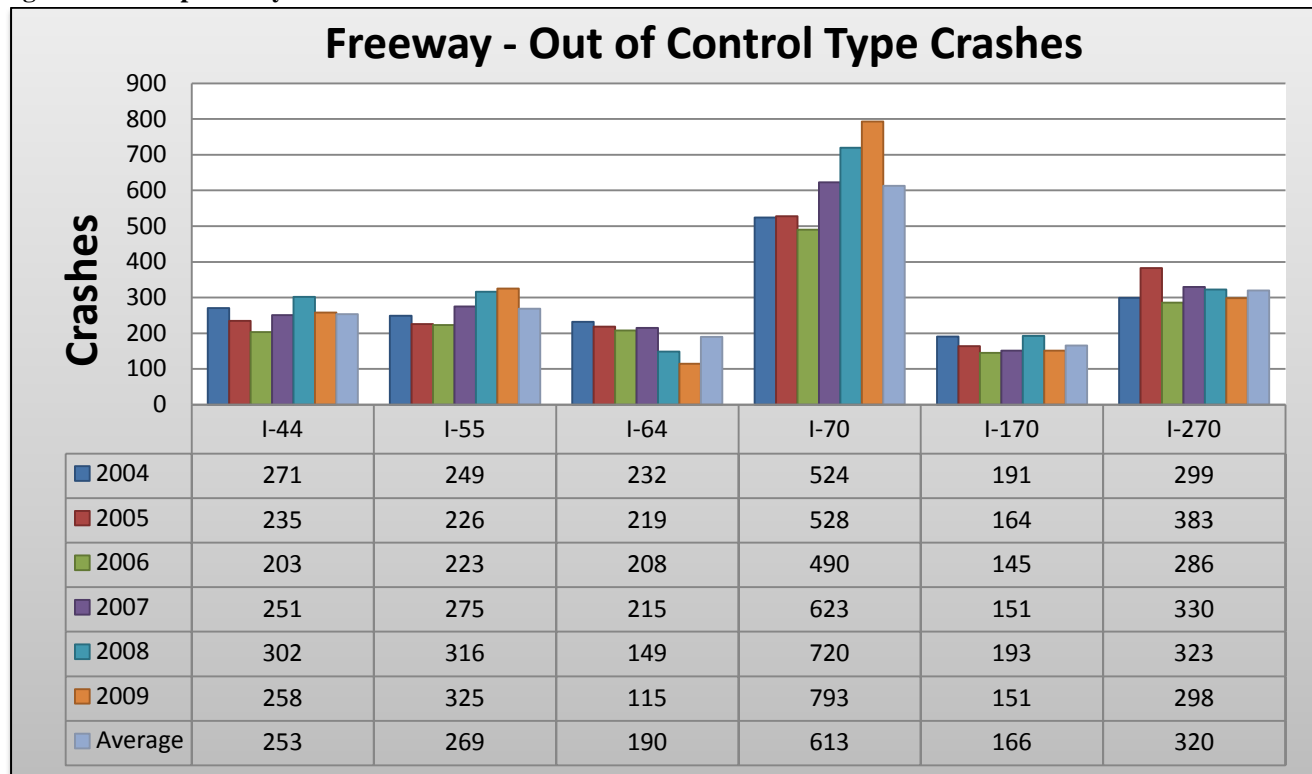


Figure S49 – Expressway Out of Control Crashes

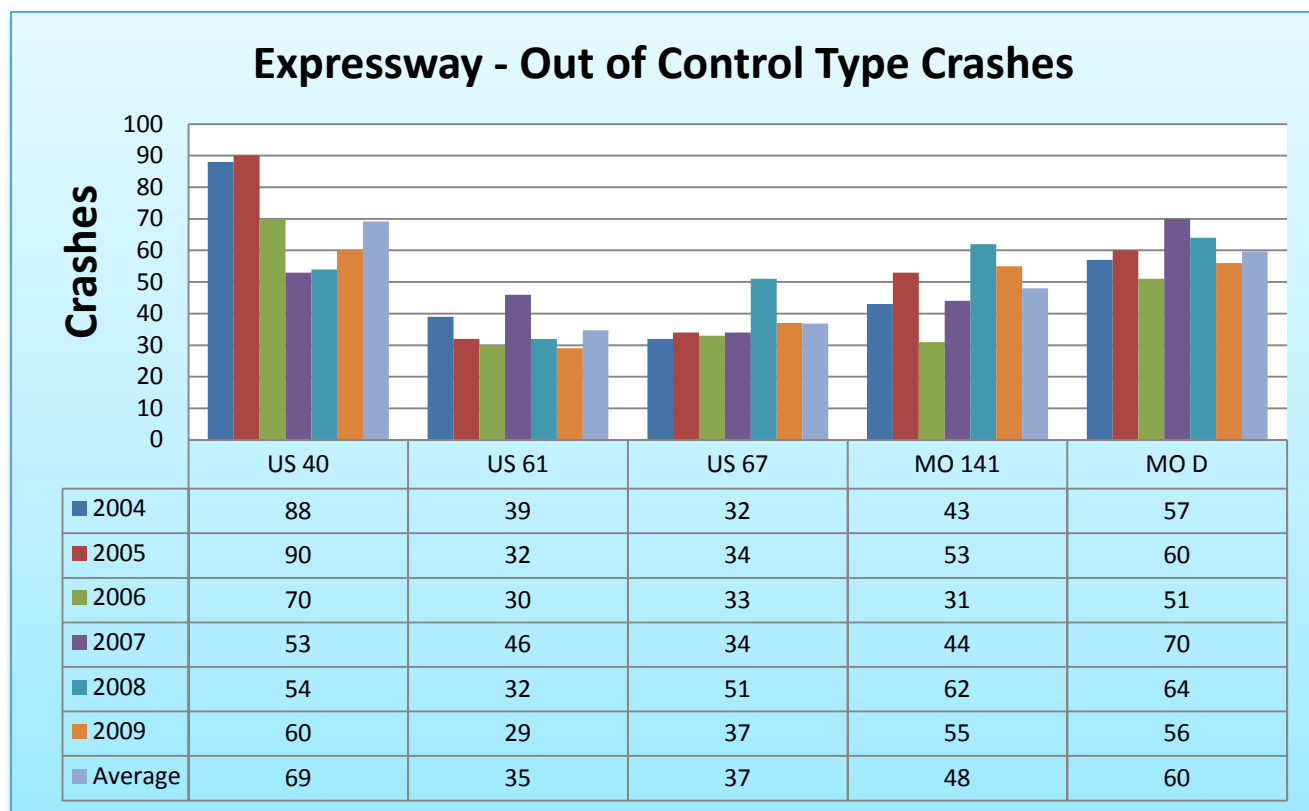


Figure S50 – Major Arterial Out of Control Crashes

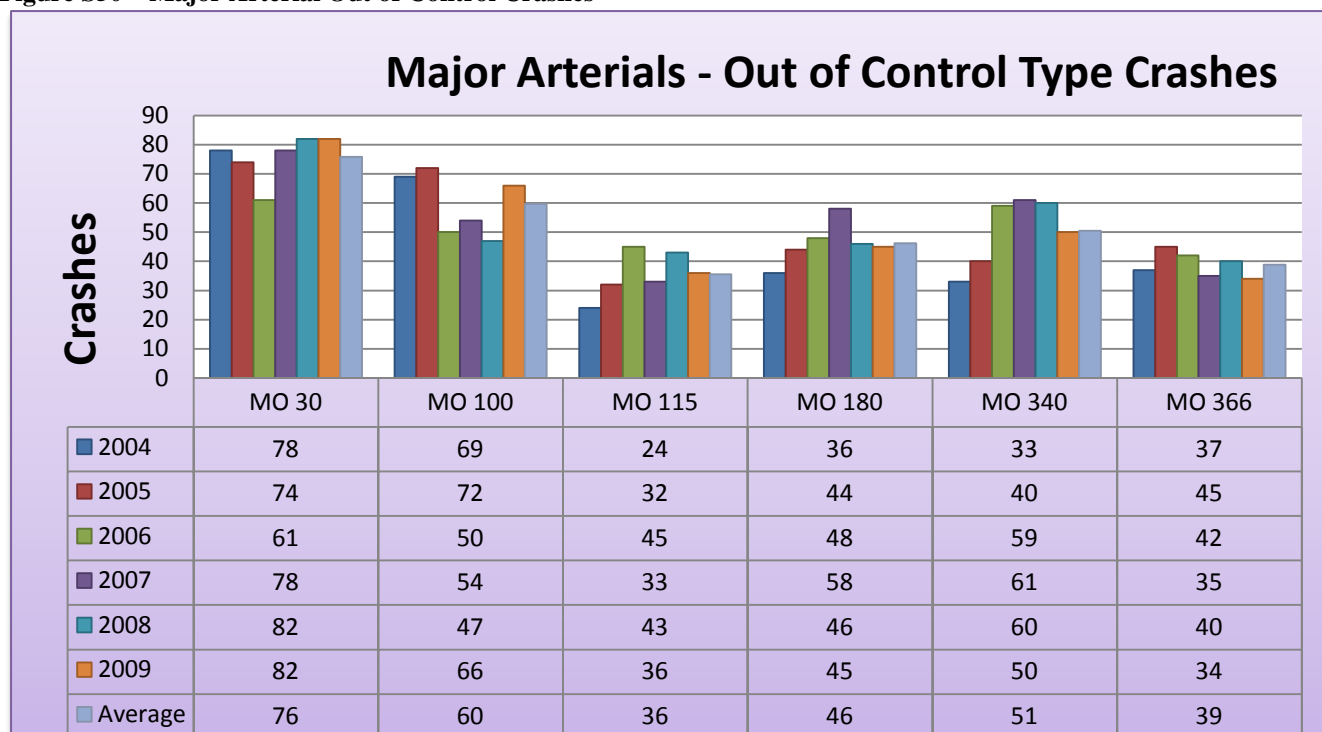


Table S20 Passing Type Crashes

Classification	Route	2004	2005	2006	2007	2008	2009	Average
Freeway	I-44	129	144	174	161	150	116	146
Freeway	I-55	161	155	183	164	153	131	158
Freeway	I-64	201	164	162	148	94	45	136
Freeway	I-70	326	312	383	383	355	297	343
Freeway	I-170	112	85	98	93	89	52	88
Freeway	I-270	250	274	297	276	236	196	255
	All	1,179	1,134	1,297	1,225	1,077	837	1,125
Expressway	US 40	43	48	63	42	33	40	45
Expressway	US 61	53	60	74	56	60	57	60
Expressway	US 67	53	42	41	35	36	41	41
Expressway	MO 141	28	48	30	33	33	30	34
Expressway	MO D	89	60	76	67	71	48	69
	All	266	258	284	233	233	216	248
Major Arterial	MO 30	106	117	86	76	57	69	85
Major Arterial	MO 100	129	81	123	109	113	77	105
Major Arterial	MO 115	55	41	57	50	51	25	47
Major Arterial	MO 180	77	70	58	67	40	48	60
Major Arterial	MO 340	87	90	94	84	56	64	79
Major Arterial	MO 366	48	55	53	48	33	31	45
	All	502	454	471	434	350	314	421

Figure S51 – Freeway Passing Type Crashes

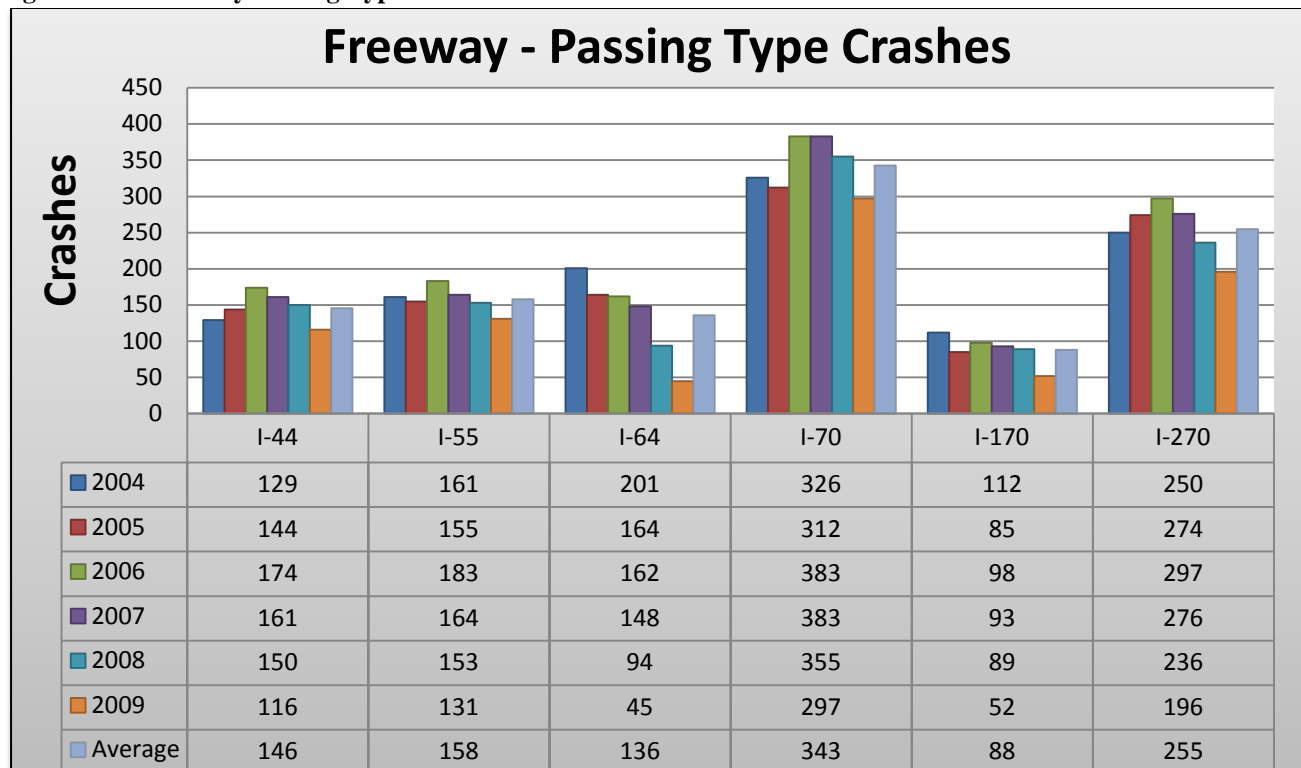


Figure S52 – Expressway Passing Type Crashes

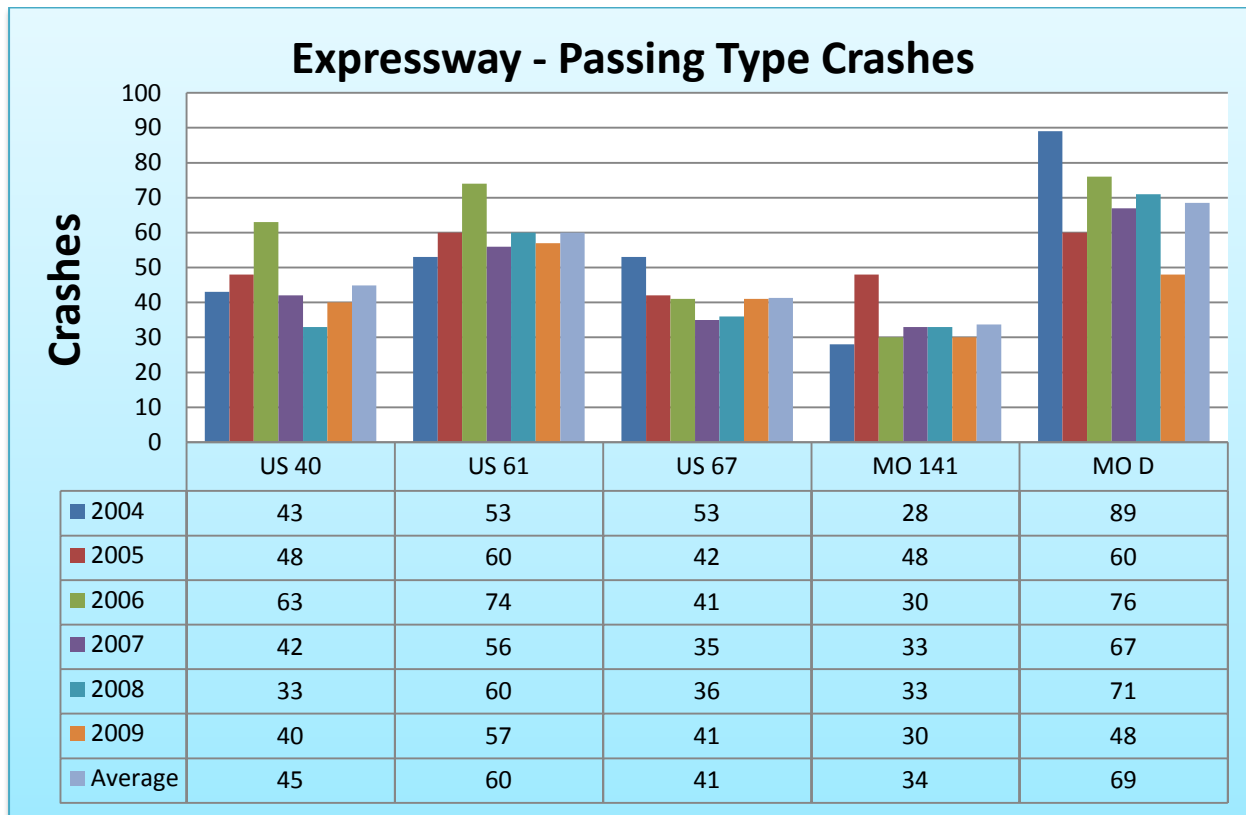


Figure S53 – Major Arterial Passing Crashes

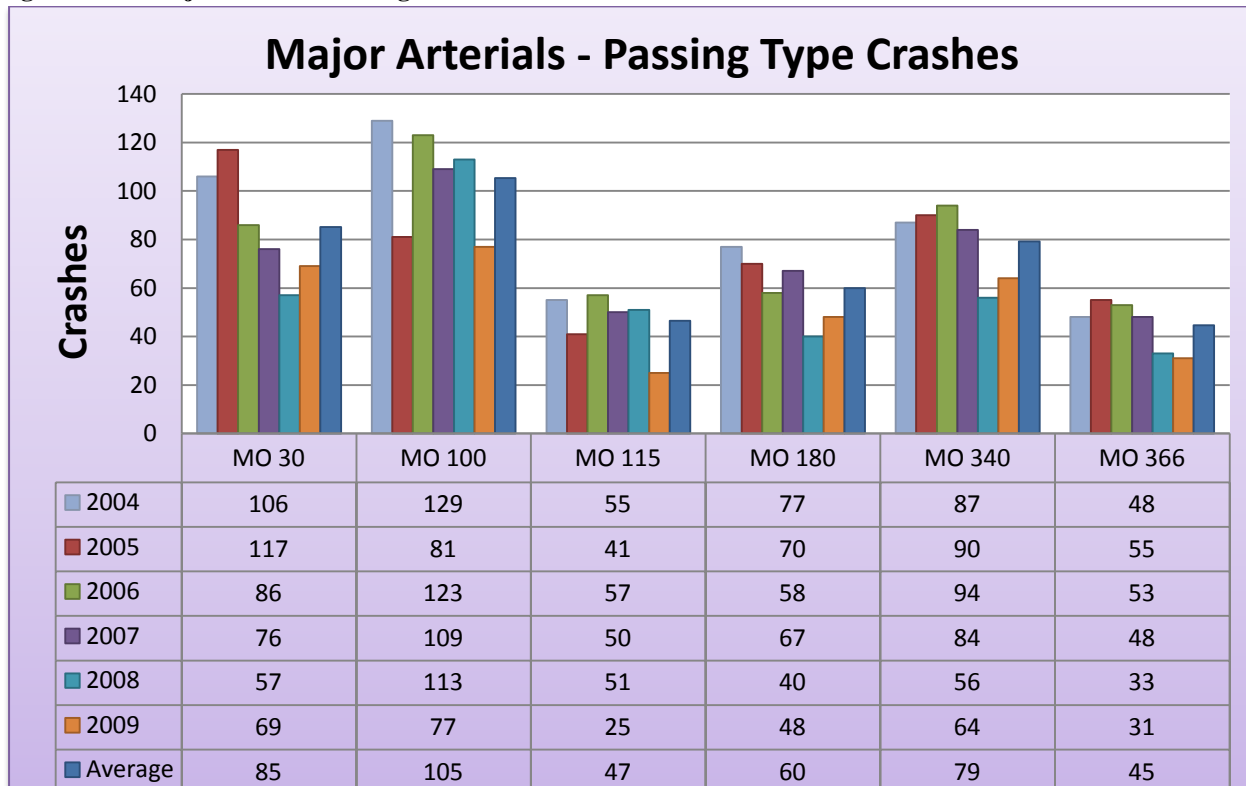


Table S21 Other Type Crashes

Classification	Route	2004	2005	2006	2007	2008	2009	Average
Freeway	I-44	228	247	234	187	246	158	217
Freeway	I-55	192	235	205	195	201	148	196
Freeway	I-64	220	353	324	247	166	51	227
Freeway	I-70	366	369	368	334	348	310	349
Freeway	I-170	148	132	121	89	132	59	114
Freeway	I-270	403	398	361	294	321	229	334
	All	1,557	1,734	1,613	1,346	1,414	955	1,437
Expressway	US 40	71	104	83	84	59	51	75
Expressway	US 61	319	318	307	298	268	246	293
Expressway	US 67	127	96	124	94	98	88	105
Expressway	MO 141	131	121	99	119	100	101	112
Expressway	MO D	219	189	202	189	212	171	197
	All	867	828	815	784	737	657	781
Major Arterial	MO 30	596	616	428	450	430	423	491
Major Arterial	MO 100	449	446	398	409	416	453	429
Major Arterial	MO 115	228	216	188	181	194	189	199
Major Arterial	MO 180	380	319	295	251	272	298	303
Major Arterial	MO 340	372	278	356	327	322	298	326
Major Arterial	MO 366	300	296	288	245	250	250	272
	All	2,325	2,171	1,953	1,863	1,884	1,911	2,018

Figure S54 – Expressway Other Crashes

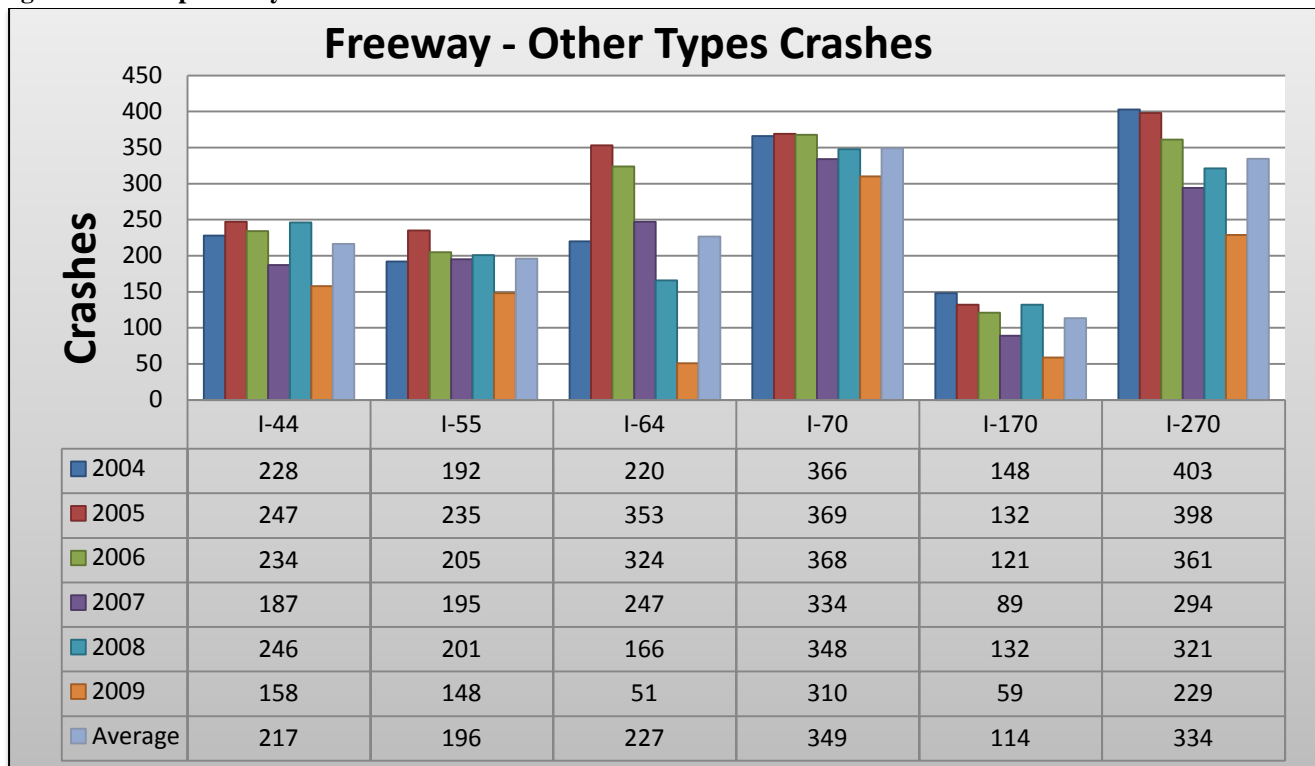


Figure S55 – Expressway Other Crashes

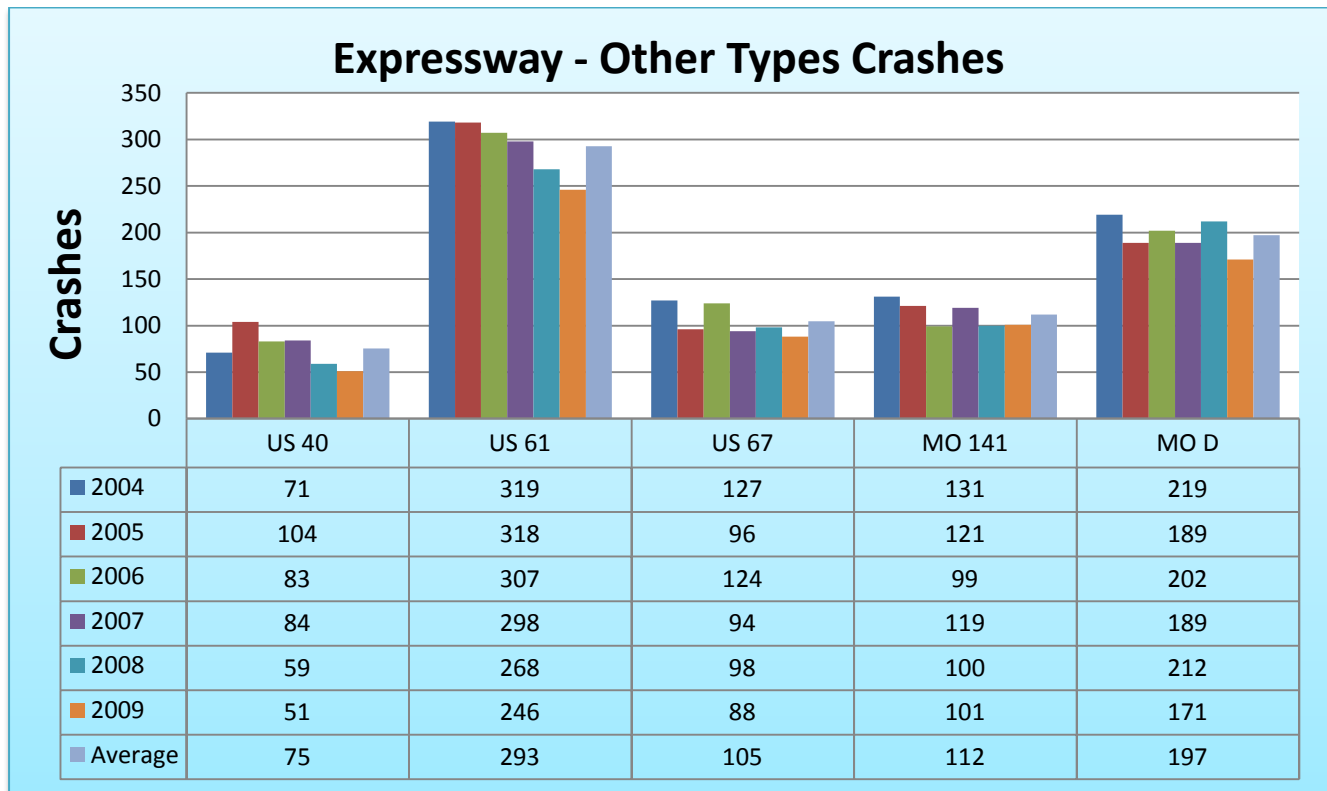


Figure S56 – Major Arterial Other Crashes

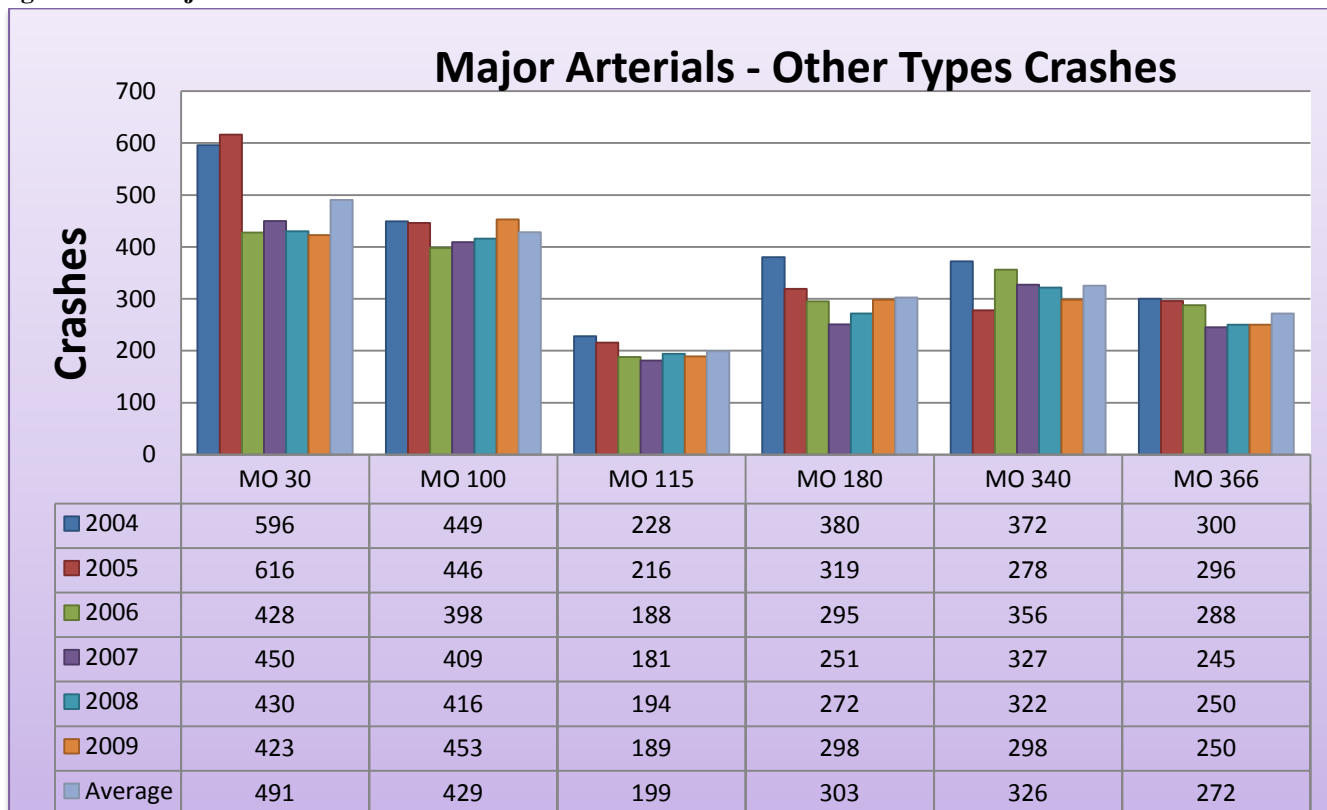


Figure S57 – Freeway - Percent of Rear-end Type Crashes to All Crashes

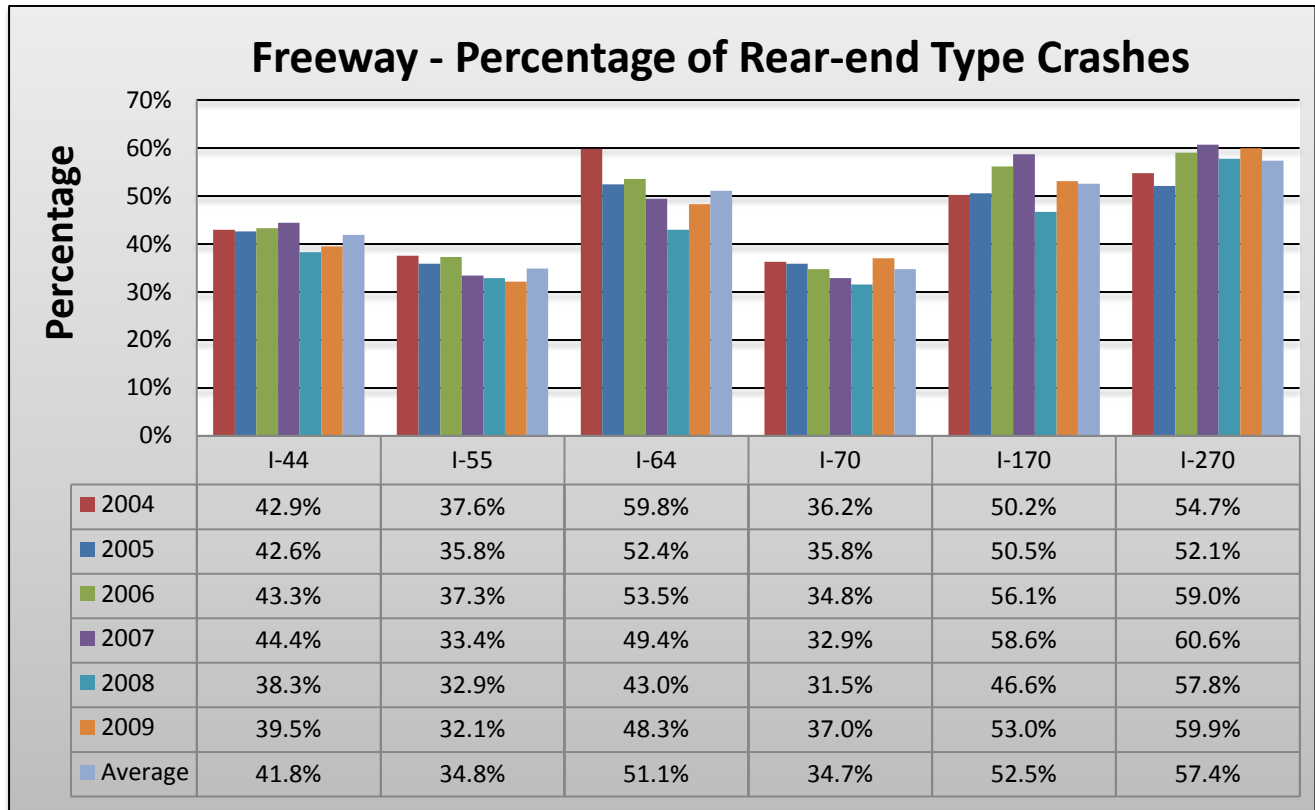


Figure S58 – Expressway - Percent of Rear-end Type Crashes to All Crashes

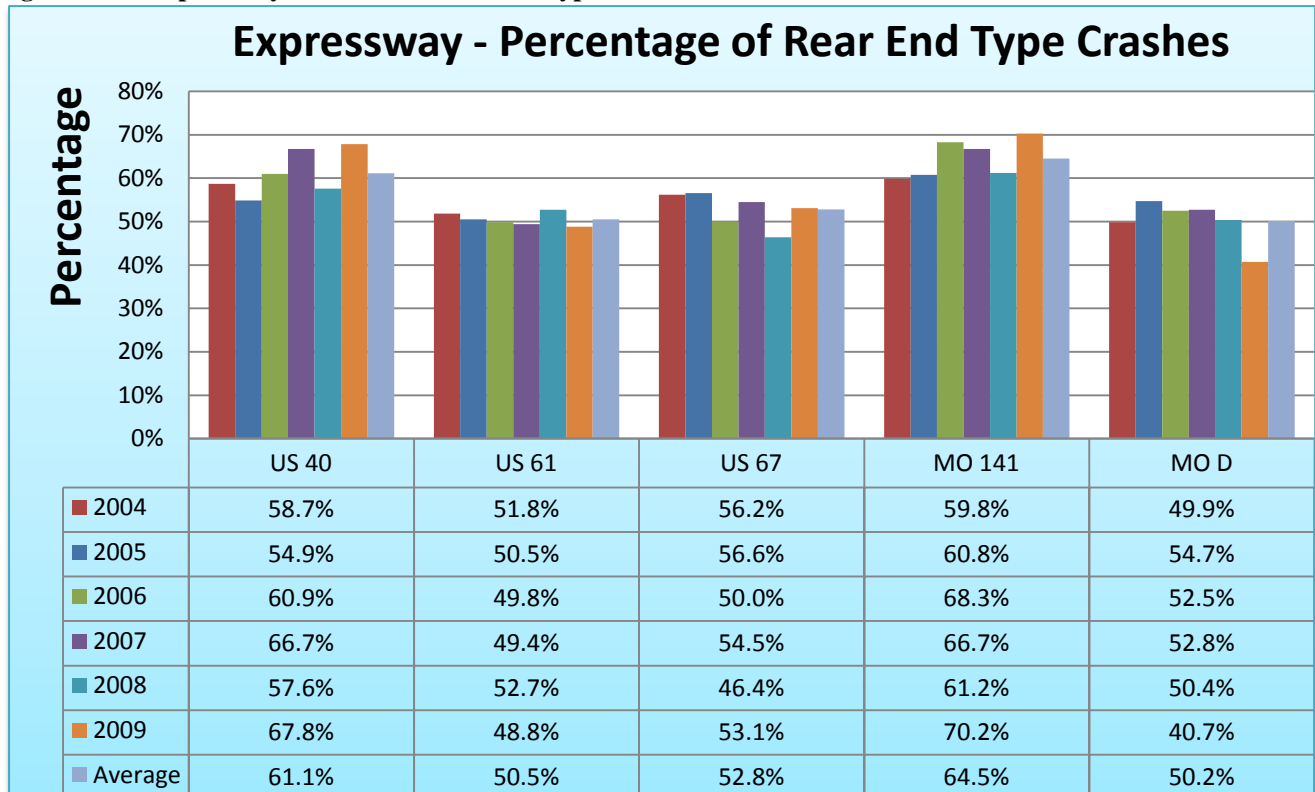


Figure S59 – Major Arterials - Percent of Rear-end Type Crashes to All Crashes

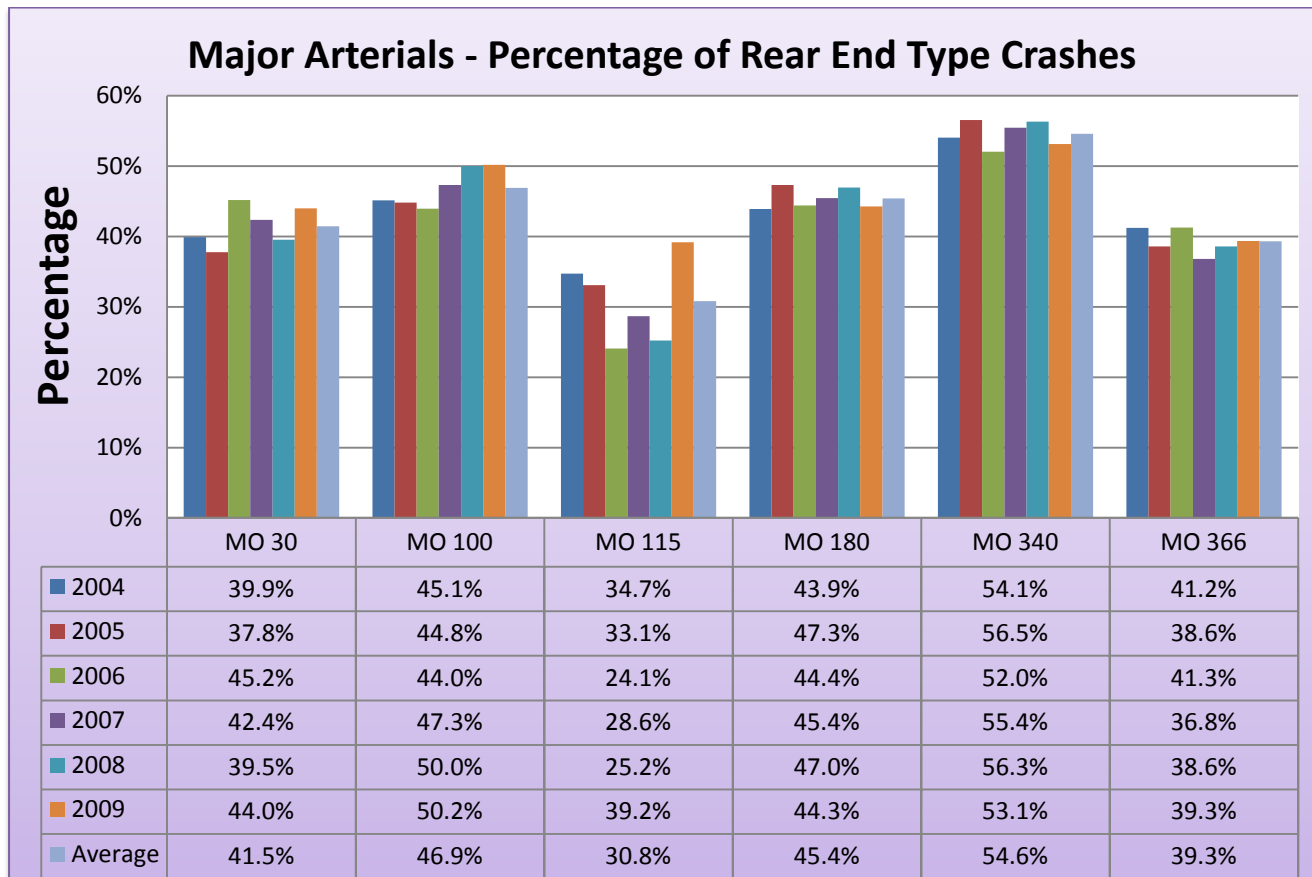


Figure S60 – Freeway - Percent of Out of Control Type Crashes to All Crashes

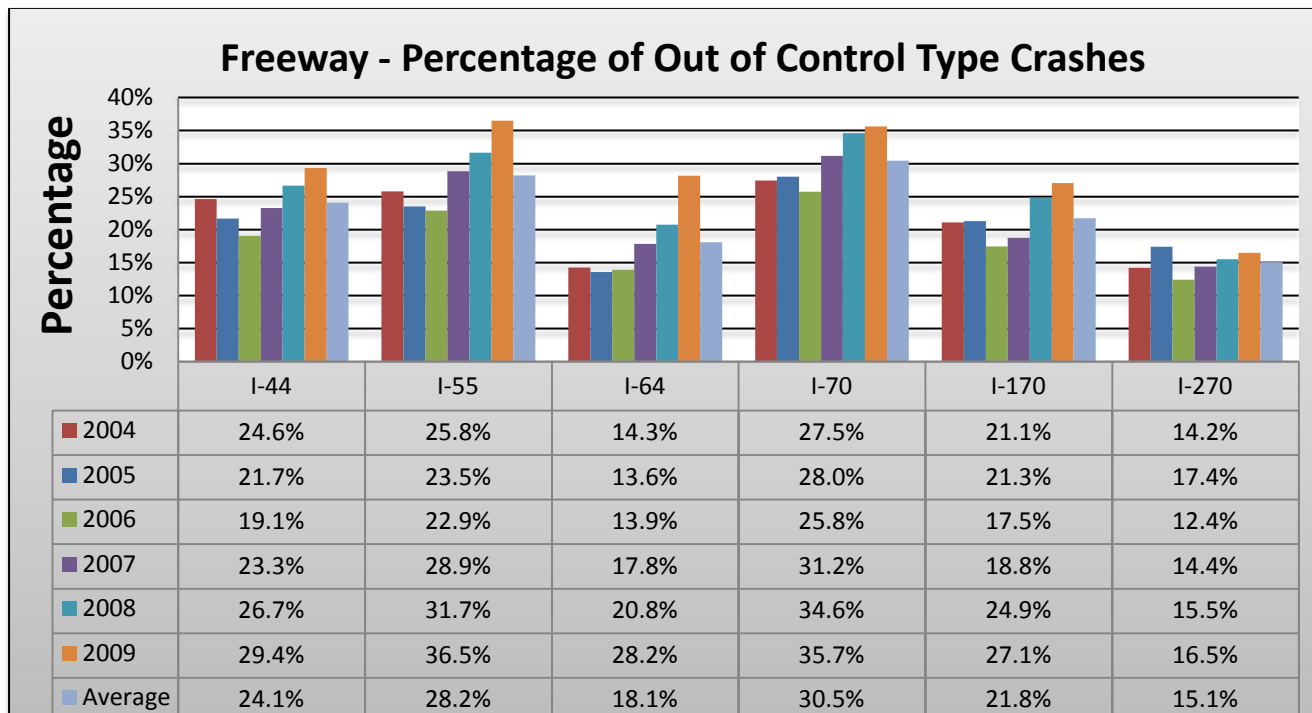


Figure S61 – Expressway - Percent of Out of Control Type Crashes to All Crashes

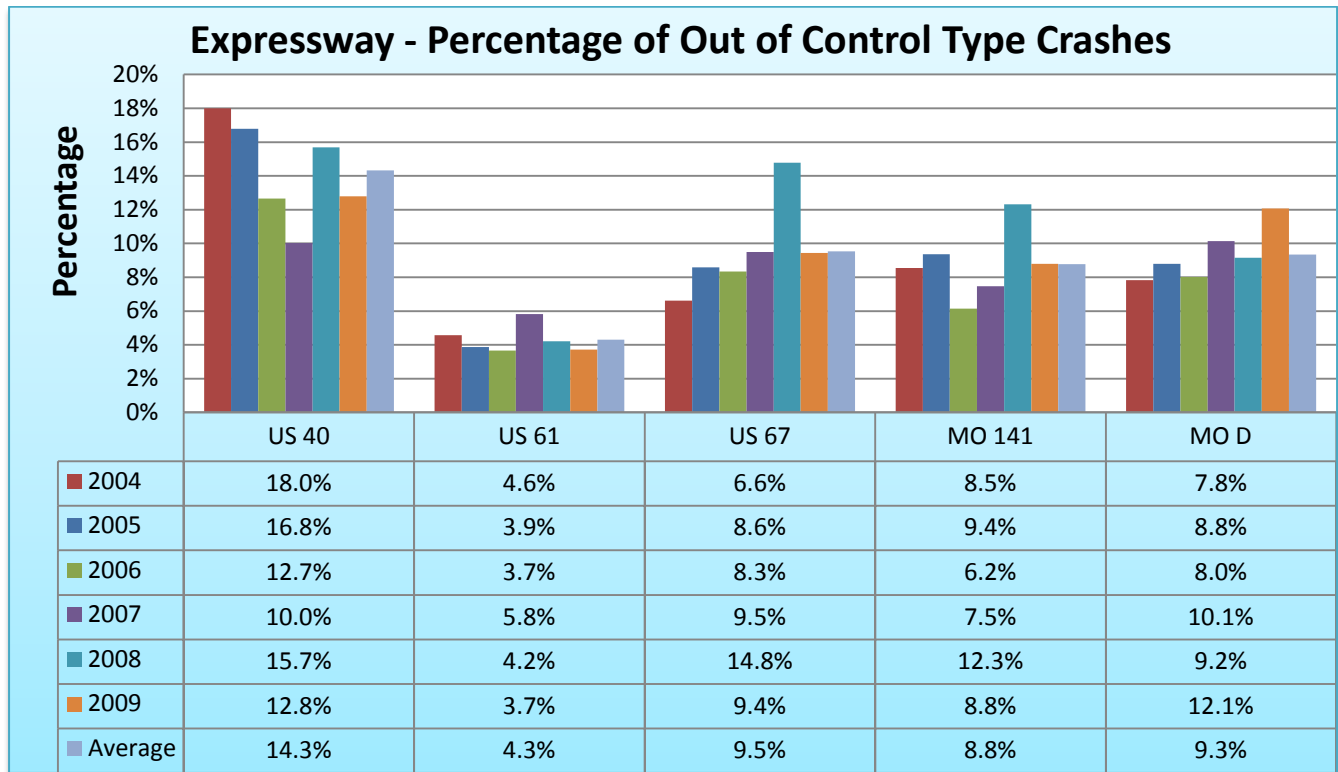


Figure S62 – Major Arterials - Percent of Out of Control Type Crashes to All Crashes

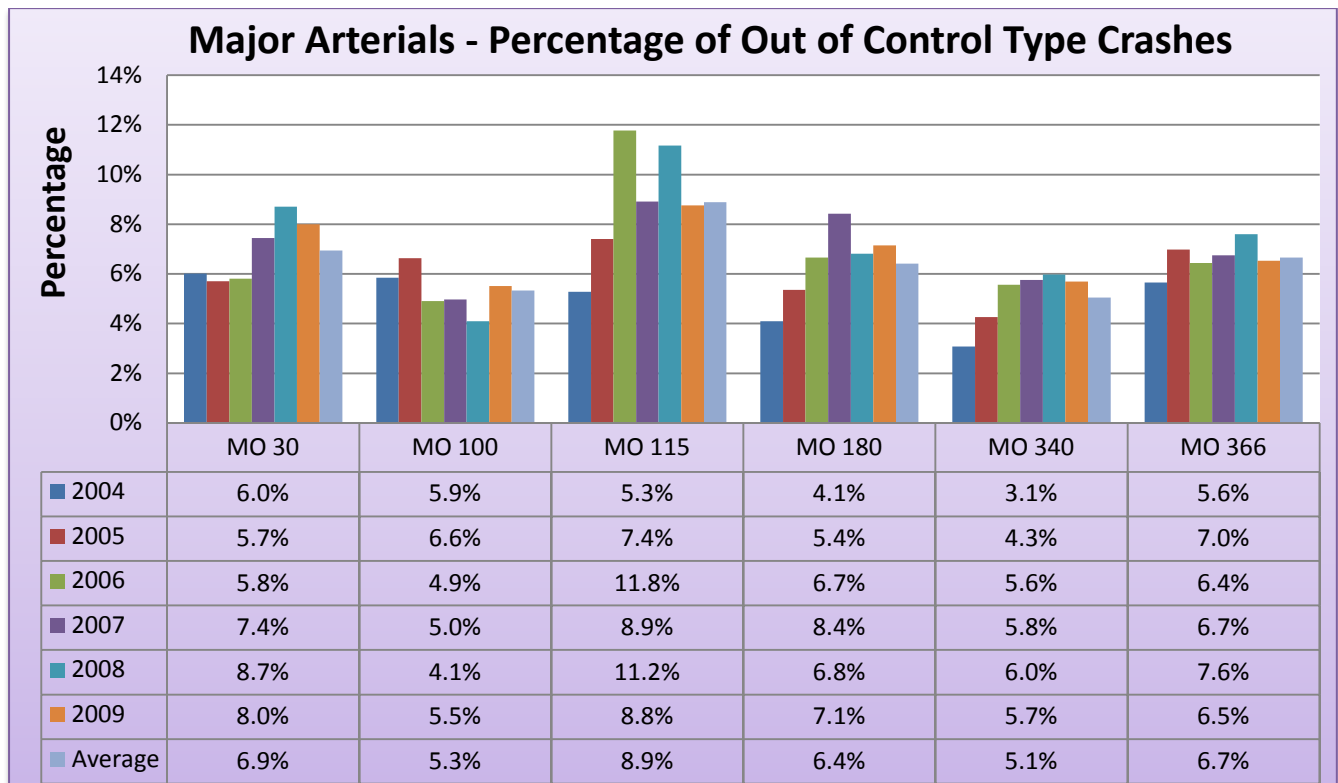


Figure S63 – Major Arterials - Percent of Passing Type Crashes to All Crashes

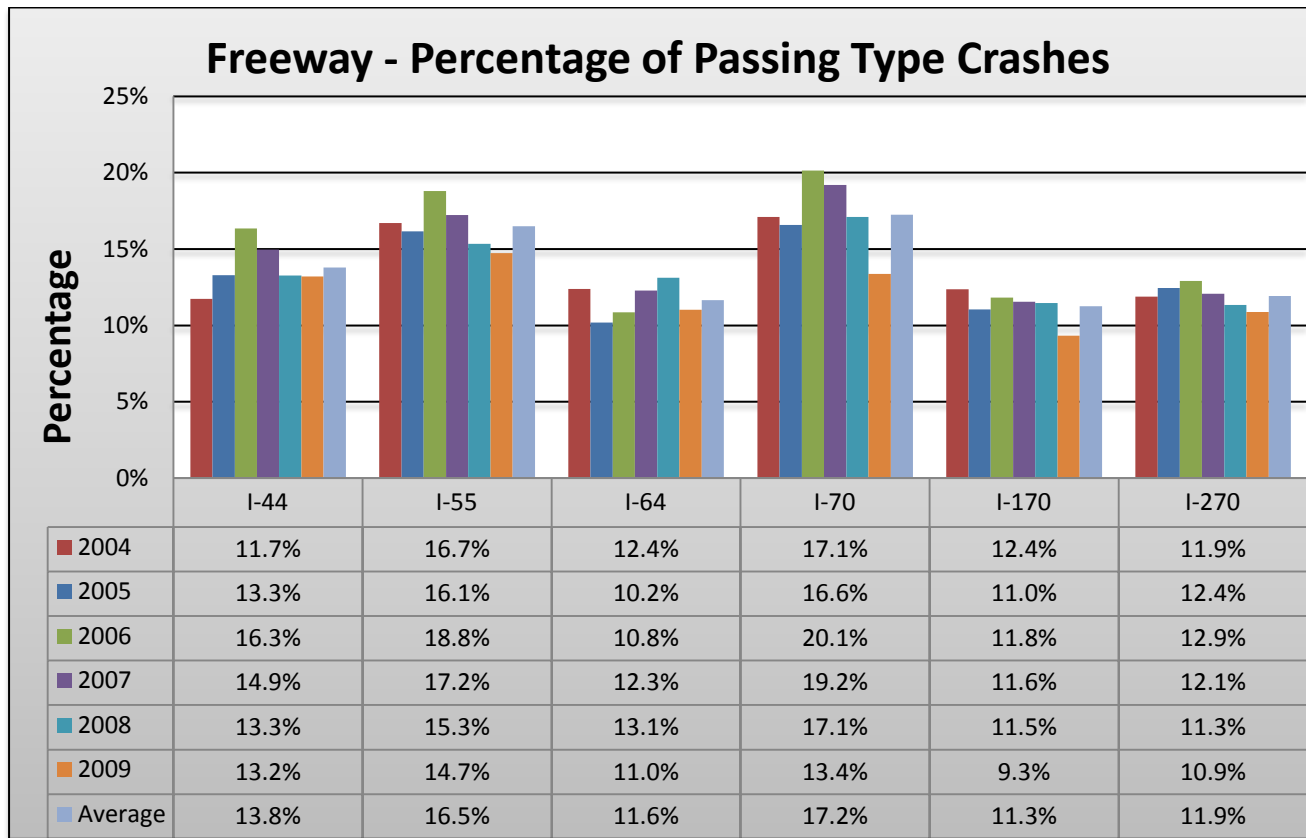


Figure S64 – Major Arterials - Percent of Passing Type Crashes to All Crashes

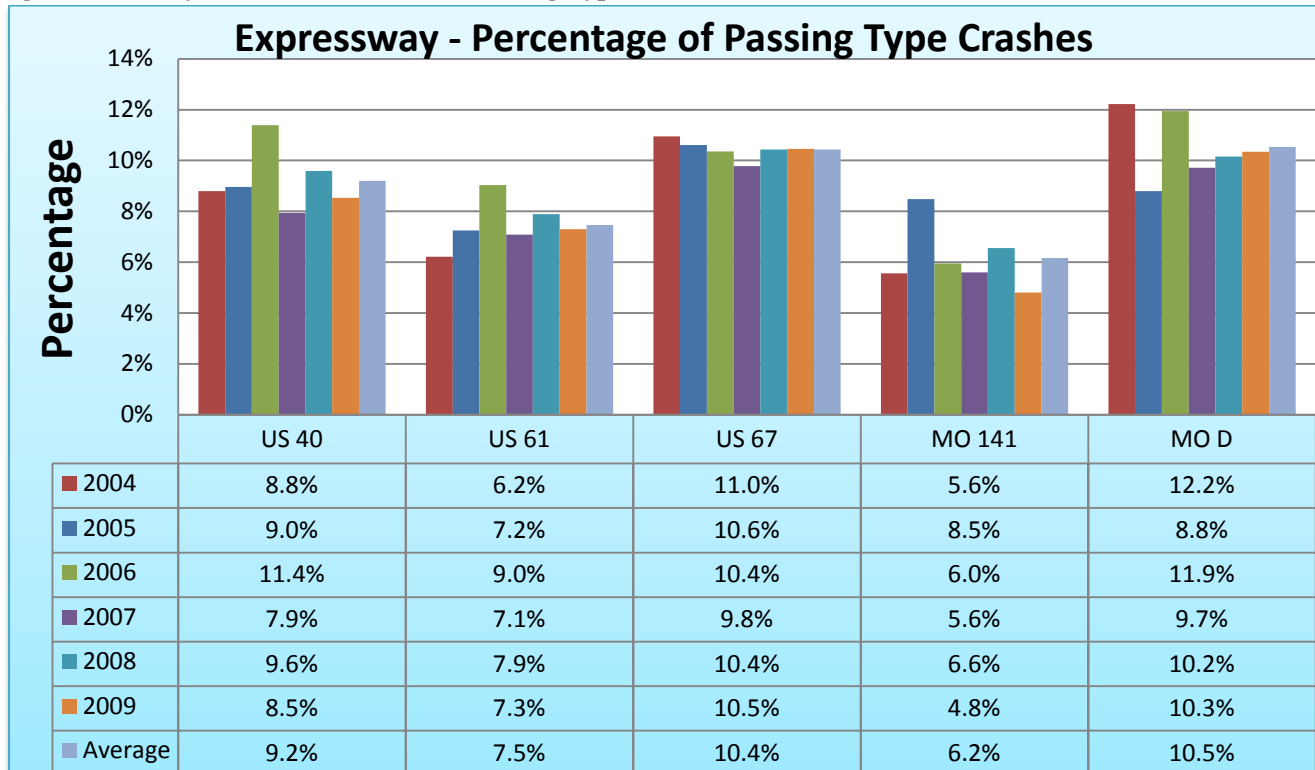


Figure S65 – Major Arterials - Percent of Passing Type Crashes to All Crashes

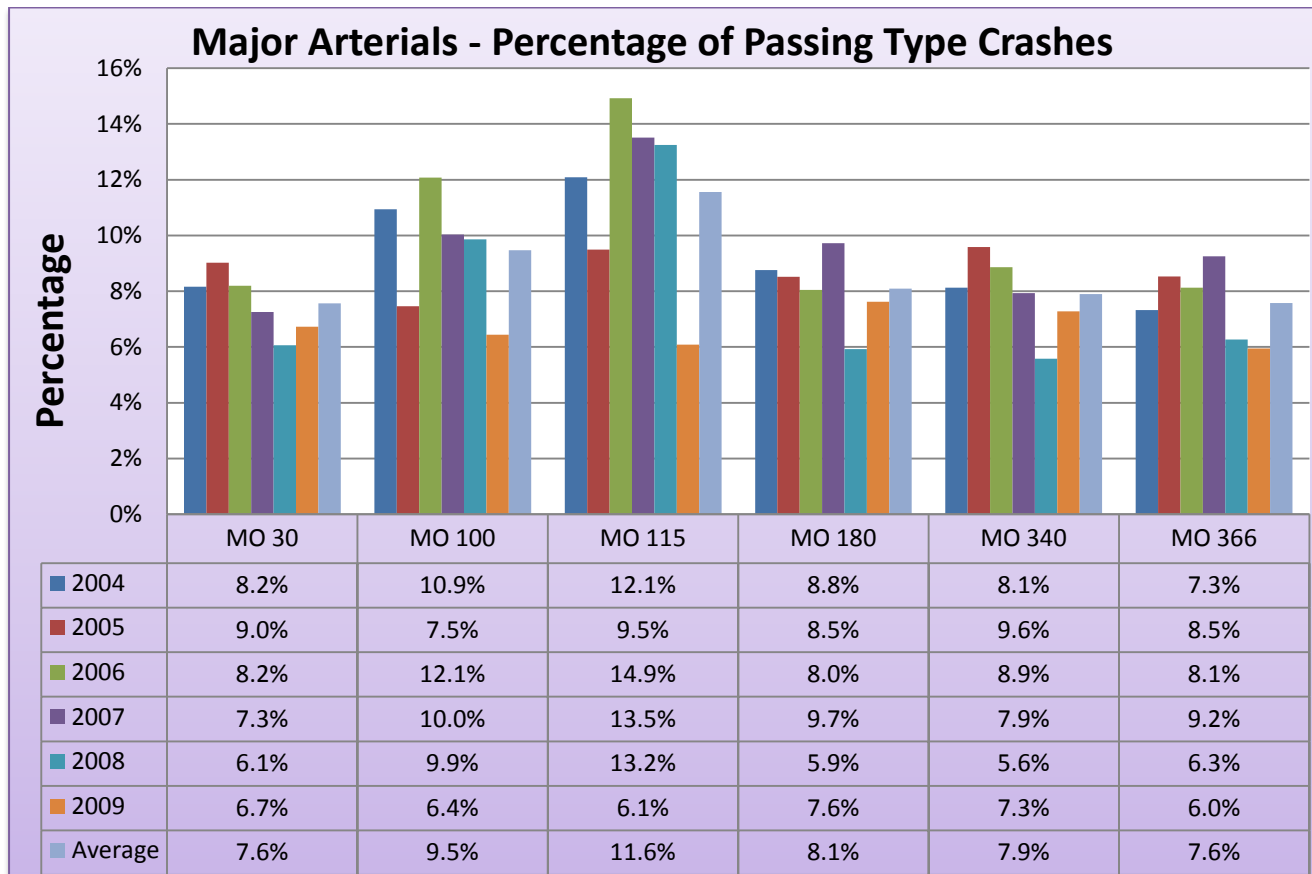


Figure S66 – Major Arterials - Percent of Other Type Crashes to All Crashes

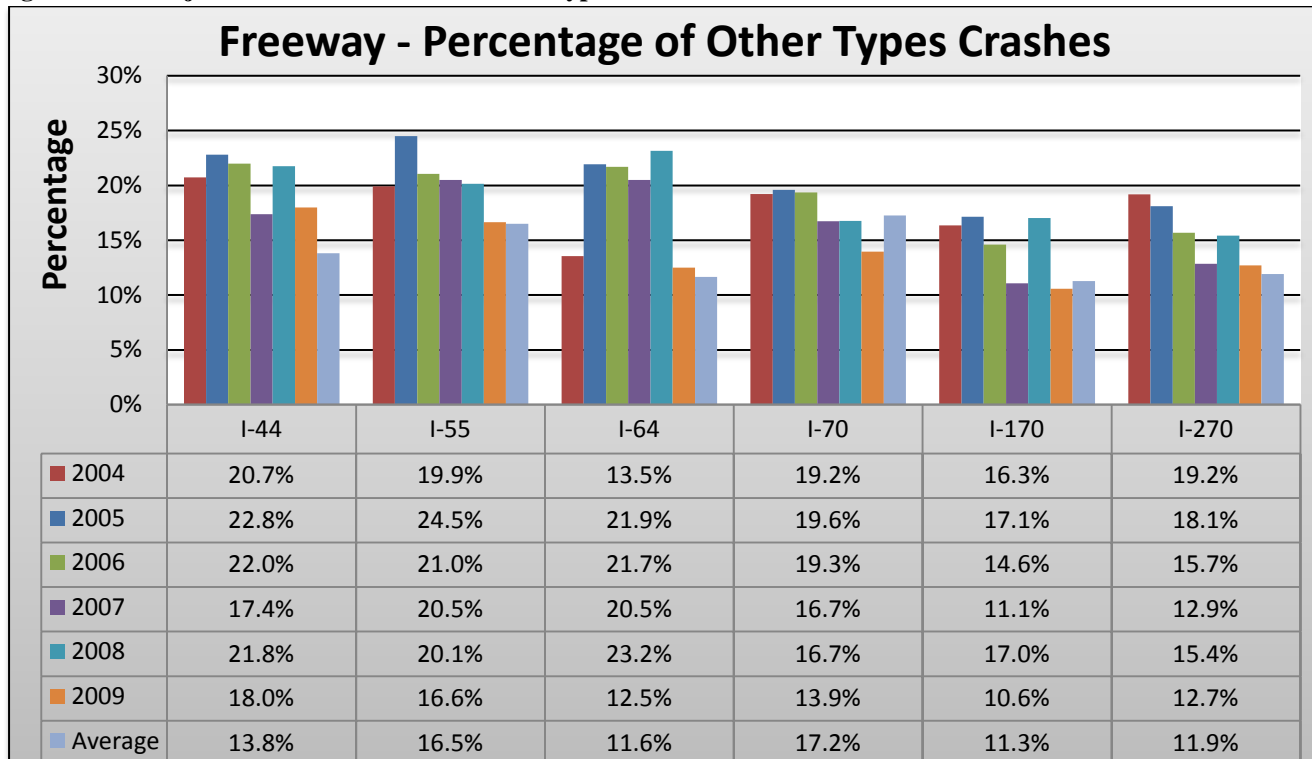


Figure S67 – Major Arterials - Percent of Other Type Crashes to All Crashes

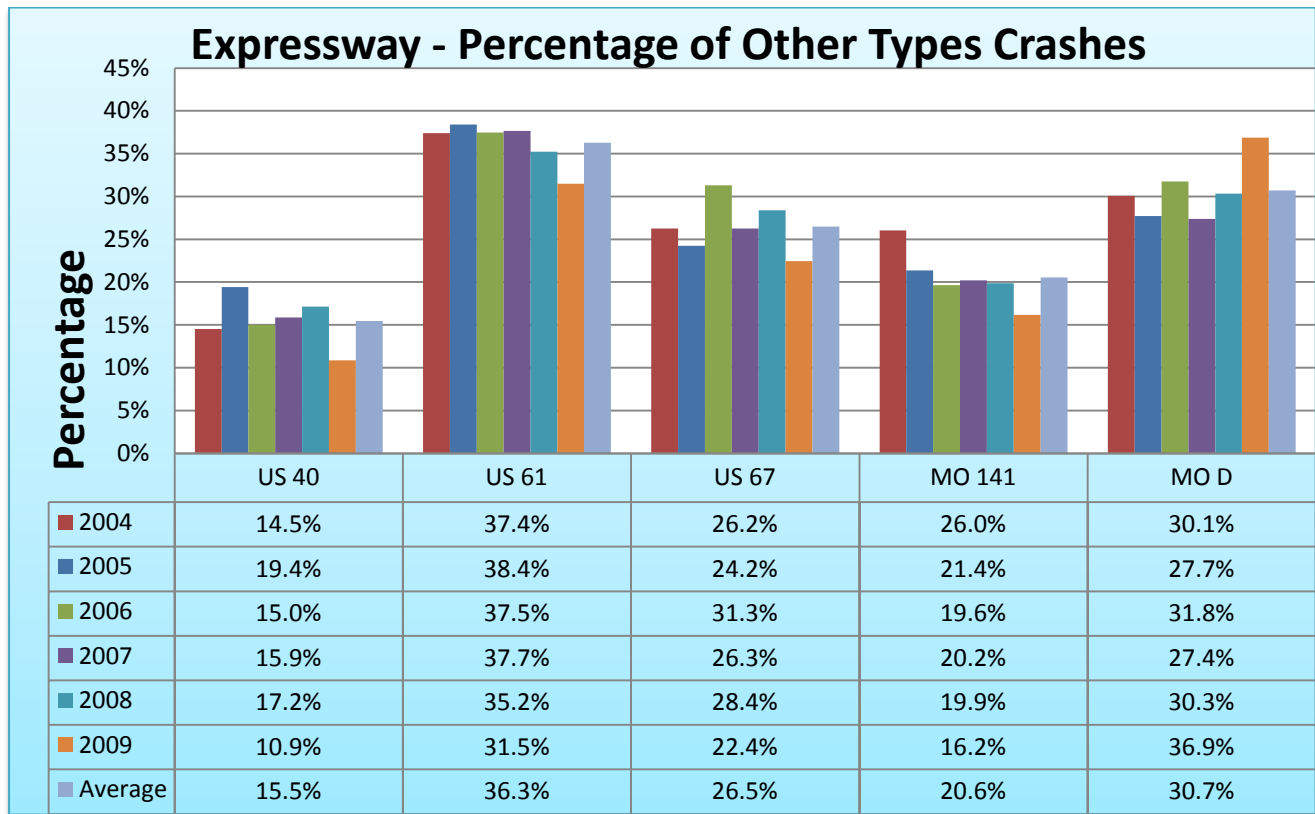
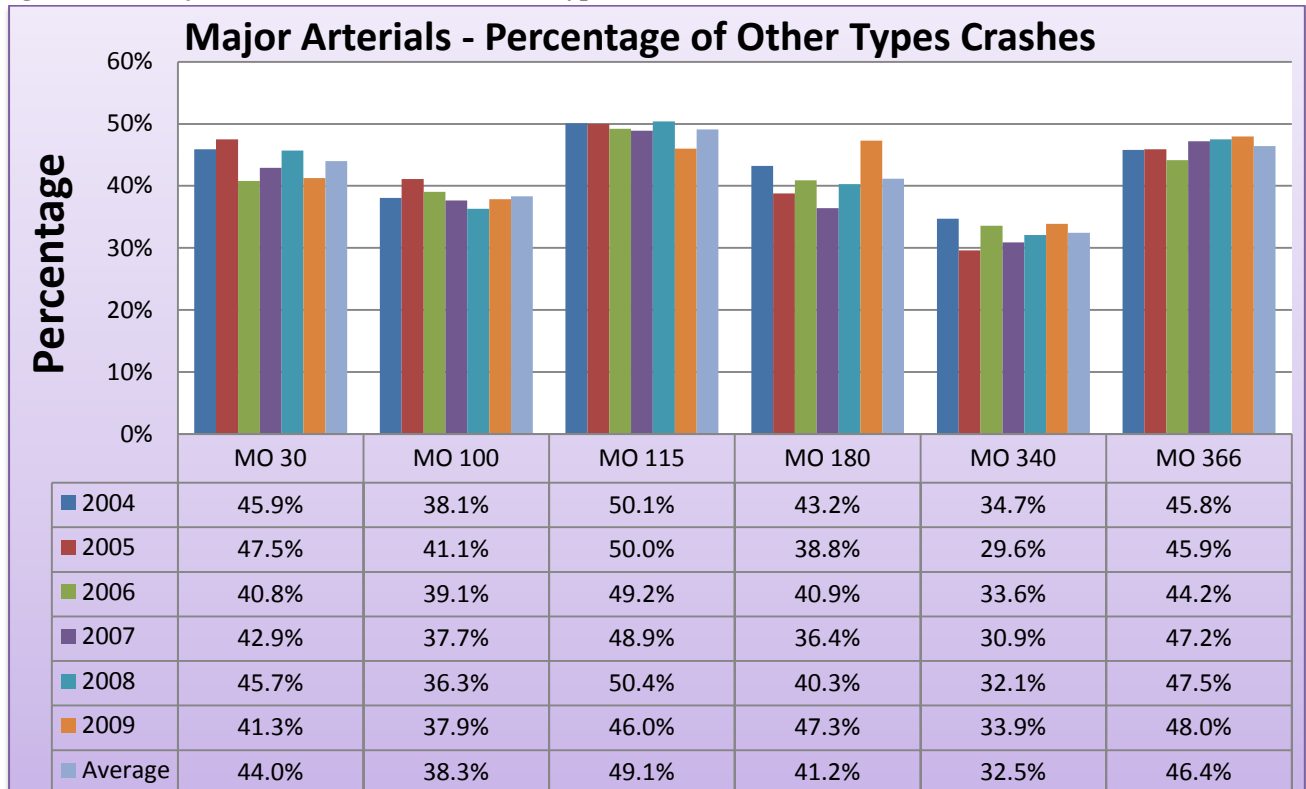


Figure S68 – Major Arterials - Percent of Other Type Crashes to All Crashes



Appendix C

The New I-64 Economic and Regional Mobility Study

Quarterly Report #5

December 2008- February
2009

Before the Closure

Please indicate how much time it takes you to make certain trips now compared to how long it took you before the closure.

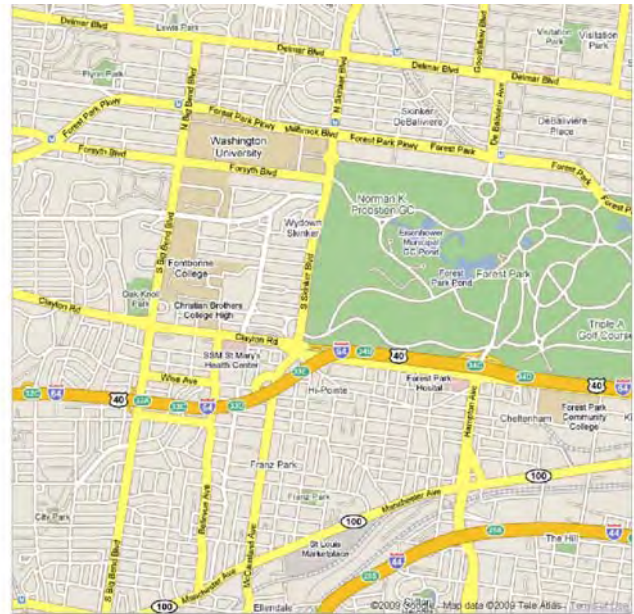
	No. of trips in 1 hour	Fewer trips in 1 hour	Same number of trips in 1 hour	It took longer to get to the destination	It took 10 minutes longer to get to the destination	It took 15 minutes longer to get to the destination	It took 20 minutes longer to get to the destination	It took 25 minutes longer to get to the destination
Education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employment or work related	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medical Visits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shopping, Recreation, and other errands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Traveling Through the St. Louis Region	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



1. Executive Summary

On December 14, 2008, the eastern closure began with the closure of I-64 between I-170 and Kingshighway Boulevard. On December 15, 2008, the western closure of the New I-64 was opened to traffic. Partners again implemented their regional command center operations to ensure that any traffic flow conditions were addressed and responded to as the public adjusted to the change in closure along I-64.

This quarterly report assesses the period December 2008 through February 2009 that includes the 12th, 13th and 14th months of the I-64 closure, evaluating the three key areas of **Project Communications** (MoDOT's provision of information to the public, and the public's response to the project), **Mobility** (the effects of the closure on travel behavior, choices, and traffic flow), and **Economics** (the effects of the closure on businesses within the corridor as well as the economic health of the region). With the eastern closure now place; the study will begin to focus attention on potential differences in the eastern closure. To date, the research team has found:



Communications (pp. 2-6)

169 online surveys since the east closure – satisfaction with how well managing to move around the St. Louis area with the closure is down. This fact was also noticed in the survey information received from motorist assist and the I-64 Traffic Response surveys.

All other key public indications are similar to the west closure survey information.

The best way to reach the public for both the east closure and west closure are similar.

The mail-in survey response was up to 11.6% return with minority participation also up.

The mail-in surveys also reflect a change satisfaction with how well managing to move around the St. Louis area with the closure similar to the online survey. All other key public indications were the same when comparing west and east closures.

Mobility (pp. 7-12)

Traffic flow, travel times and average speed continue to be similar as reported previously.

Travel patterns have changed as commuters adjusted the opening of the western section and the closure of the eastern section.

Annual report is being developed and will provide more in-depth analysis of mobility and safety issues.

Economics (pp. 13-25)

Taxable sales are down for the region when compared to 2007. St. Louis like the rest of the nation is experiencing impacts from the current recession.

Residential and non-residential construction taxable sales are still below the 2005 level. This fact is characteristic of our nation in general.

The second business survey's major findings are included in this quarterly report. Satisfaction with MoDOT's execution of the project is 96%.

The initial survey had 169 responses compared to the 84 responses received in the second survey. This fact might be an indicator of perception of the business community on the impact of the I-64 project.

Survey participants still mentioned an increase in transportation cost.

2. Communications

In this quarter, we obtained respondent input via a new online survey, recipients of Motorist Assistance, and from responses to our second mailed survey. In this report, the project team compared the results of previous surveys, which measured respondent perspectives on the Western Closure, with the new surveys which measure respondent perspectives on the Eastern Closure. **All three methods indicate that overall satisfaction remains high even though the Eastern Closure appears to be having more of an impact on behavior than the Western Closure did.**

Online Survey

Based on the online data, the Eastern Closure is having a greater impact on respondent behavior than that of the Western Closure. “Satisfaction with how well managing to move around the St. Louis area with the closure” is noticeably different. Despite this reported increased impact, overall satisfaction with MoDOT remains very high – almost identical to the results from the Eastern Closure as shown in table below.

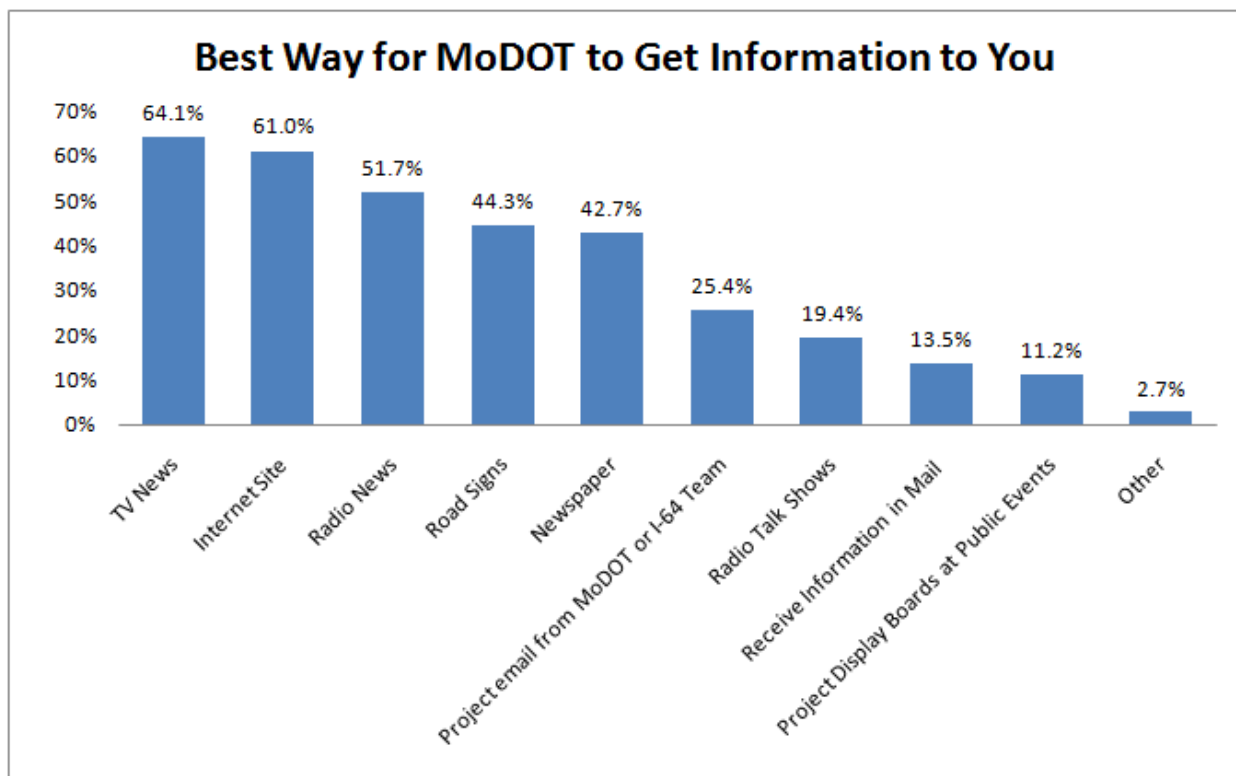
Key Public Indicators - Online Comparison of Both Closures	Western Closure	Eastern Closure	Total
Overall level of satisfaction with how the I-64 closure has been handled	76.7%	75.8%	76.6%
Satisfaction with how well the public kept informed about the new I-64 project	88.7%	89.8%	88.9%
Satisfaction with how well managing to move around the St. Louis area w/ the closure	69.7%	58.1%	68.4%
Satisfaction with timeliness of information being made available	87.5%	89.7%	87.8%
Agreement with “the closure has changed where I shop”	41.5%	45.8%	41.9%
Agreement with “the closure has changed how often I travel to certain areas”	73.3%	76.7%	73.7%
Satisfaction with decision to complete the work by closing I-64 for 2 years instead of 6-8 years w/ lane closures	76.5%	80.5%	77.0%
<i>Survey responses</i>	<i>1,362</i>	<i>169</i>	<i>1,531</i>

Respondents are less satisfied with their ability to move around the St. Louis area and more likely to state that the Eastern Closure has changed where they shop and how often they travel to certain areas was noticed. The project team will monitor this trend in upcoming monthly and quarterly reports.

The best ways to reach online respondents is unchanged from last year as recorded in the following table:

Best Way for MoDOT to Get Information to You	Western Closure	Eastern Closure	Total
TV News	62.4%	77.5%	64.1%
Internet Site	60.2%	67.5%	61.0%
Radio News	51.2%	55.6%	51.7%
Road Signs	43.2%	52.7%	44.3%
Newspaper	43.0%	40.2%	42.7%
Project email from MoDOT or I-64 Team	24.2%	34.9%	25.4%
Radio Talk Shows	19.8%	16.6%	19.4%
Receive Information in Mail	13.1%	16.6%	13.5%
Project Display Boards at Public Events	10.8%	14.8%	11.2%
Other	2.6%	3.6%	2.7%

The following chart presents the total column to graphically indicate the best way to reach these respondents based on the on-line survey tool.



Throughout the online survey, respondents were given multiple opportunities to comment and many people did so. A supplement to this report has been provided that contains all of the recipient comments.

Motorist Assist

Two key questions are asked via MoDOT's Motorist Assist program as another way of obtaining information. The change measured since the Eastern Closure has been minor, but in accordance with that of the other methods. People are finding it slightly more difficult to move around, but are still quite satisfied, especially with the decision to close I-64 for two years instead of six to eight years with lane closures. The following table shows the percentage comparison:

Key Public Indicators - Motorist Assist Comparison of Both Closures	Western Closure	Eastern Closure	Total
Satisfaction with how well managing to move around the St. Louis area w/ the closure	90.0%	88.5%	89.7%
Satisfaction with decision to complete the work by closing I-64 for 2 years instead of 6-8 years w/ lane closures	93.8%	95.1%	94.1%
<i>Survey responses</i>	3,837	816	4,653

Mailed Survey

As was done the previous year, 10,000 residents in the St. Louis Metropolitan area were mailed surveys in January. This year's response rate of 11.6% was significantly higher than that of last year. This greater response can probably be attributed to the additional year of publicity concerning the New I-64 Project. The following shows the comparison between the first and second mailed survey:

	Western Closure	Eastern Closure
Number Mailed	10,000	10,000
Responses	776	1,156
Response Rate	7.8%	11.6%

Minority participation increased to 22.9% of all respondents this year. All of the increase was due to a significant increase in the number of African American respondents. The percentages for the ethnic representation in the following table do not equal 100% because many respondents omitted this information.

Ethnic Representation	Western Closure	Eastern Closure
American Indian	1.5%	0.6%
Asian	0.9%	0.7%
Black or African American	16.0%	19.9%
Hispanic or Latino	1.2%	0.6%
White or Caucasian	76.8%	73.4%
Other	1.7%	1.1%

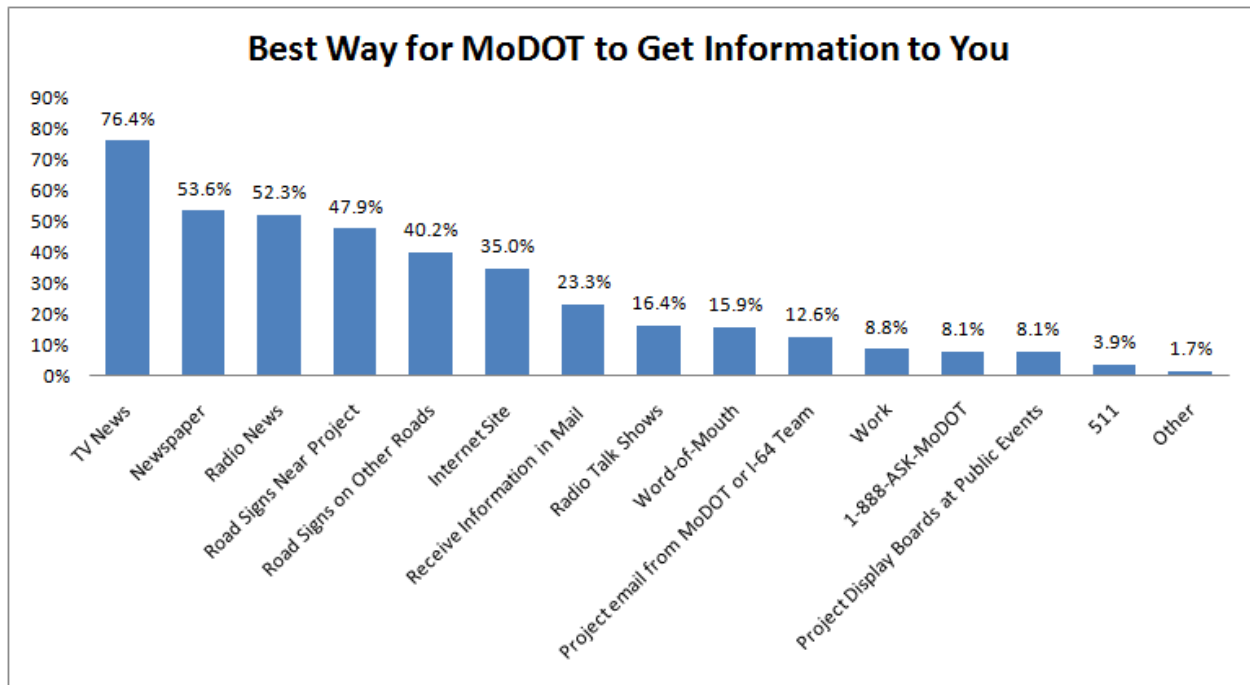
The Eastern Closure is having a greater impact on respondent behavior than that of the Western Closure. Despite this increased impact, satisfaction with MoDOT remains very high – almost identical to the results from the first mailing. The following table demonstrates the comparison between the Eastern and Western Closures:

Key Public Indicators - Comparison of Two Mailings	Western Closure	Eastern Closure	Total
Overall level of satisfaction with how the I-64 closure has been handled	87.8%	89.4%	88.8%
Satisfaction with how well the public kept informed about the new I-64 project	94.9%	94.7%	94.8%
Satisfaction with how well managing to move around the St. Louis area w/ the closure	82.6%	73.7%	77.3%
Satisfaction with timeliness of information being made available	93.8%	93.3%	93.5%
Agreement with “the closure has changed where I shop”	29.3%	38.0%	34.5%
Agreement with “the closure has changed how often I travel to certain areas”	60.1%	67.5%	64.6%
Satisfaction with decision to complete the work by closing I-64 for 2 years instead of 6-8 years w/ lane closures	85.1%	90.8%	88.5%
<i>Survey responses</i>	<i>776</i>	<i>1,156</i>	<i>1,932</i>

The top seven ways for MoDOT to reach these respondents is unchanged from the previous results.

Best Way for MoDOT to Get Information to You	Western Closure	Eastern Closure	Total
TV News	76.0%	76.6%	76.4%
Newspaper	55.2%	52.5%	53.6%
Radio News	53.1%	51.7%	52.3%
Road Signs Near Project	47.3%	48.4%	47.9%
Road Signs on Other Roads	39.3%	40.7%	40.2%
Internet Site	37.6%	33.2%	35.0%
Receive Information in Mail	21.3%	24.7%	23.3%
Radio Talk Shows	17.4%	15.7%	16.4%
Word-of-Mouth	17.7%	14.8%	15.9%
Project email from MoDOT or I-64 Team	11.3%	13.5%	12.6%
Work	10.1%	8.0%	8.8%
1-888-ASK-MoDOT	8.2%	8.0%	8.1%
Project Display Boards at Public Events	8.1%	8.1%	8.1%
511	5.8%	2.7%	3.9%
Other	1.8%	1.6%	1.7%

The following chart presents the total column to graphically indicate the best way to reach these respondents from mailed survey.



3. Mobility

The annual report will provide more detailed information and assessment on mobility impacts. Limited corridor comparisons are presented in this quarterly report as we prepare for the annual report when more detail information will be presented. The eastern closure continues to shifted traffic normally using the I-64 corridor to adjacent arterial and freeway corridors. The following provides baseline and quarter information for the freeway monitoring locations:

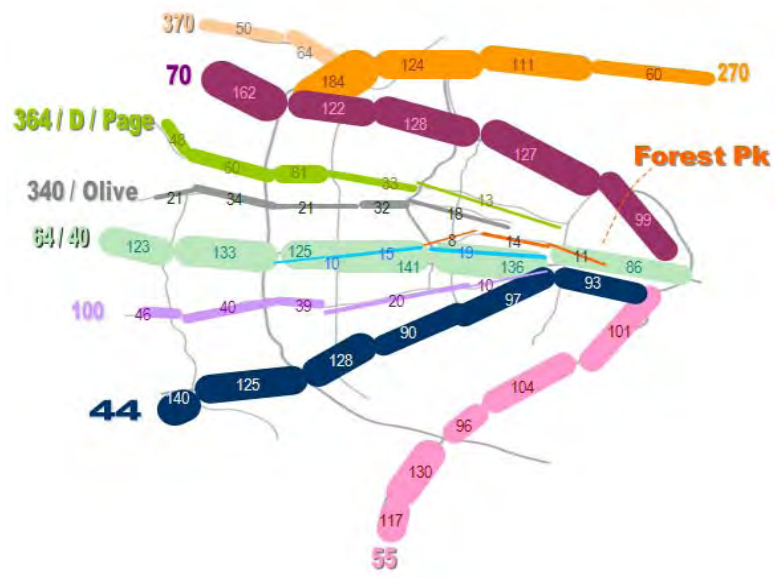
NS Baseline



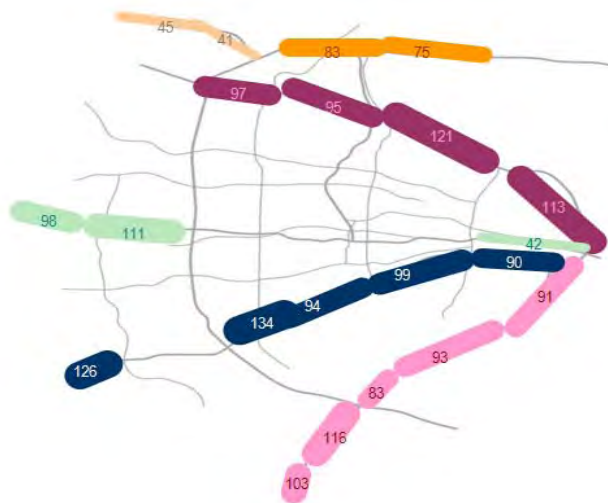
NS 2009



EW Baseline

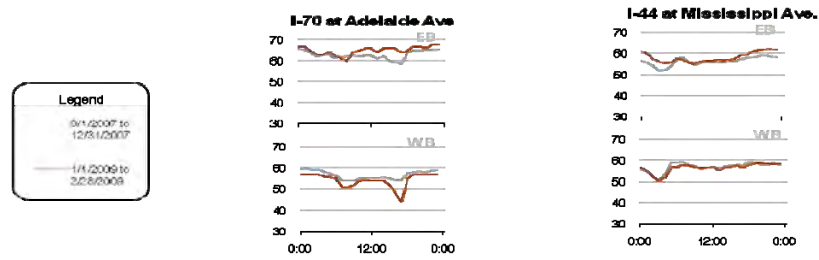


EW 2009

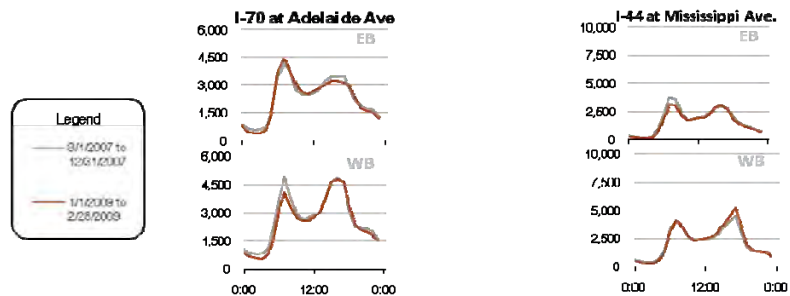


The following provides a sample of speed and traffic volume comparisons for the same quarter in the baseline and 2009.

Speed



Volume

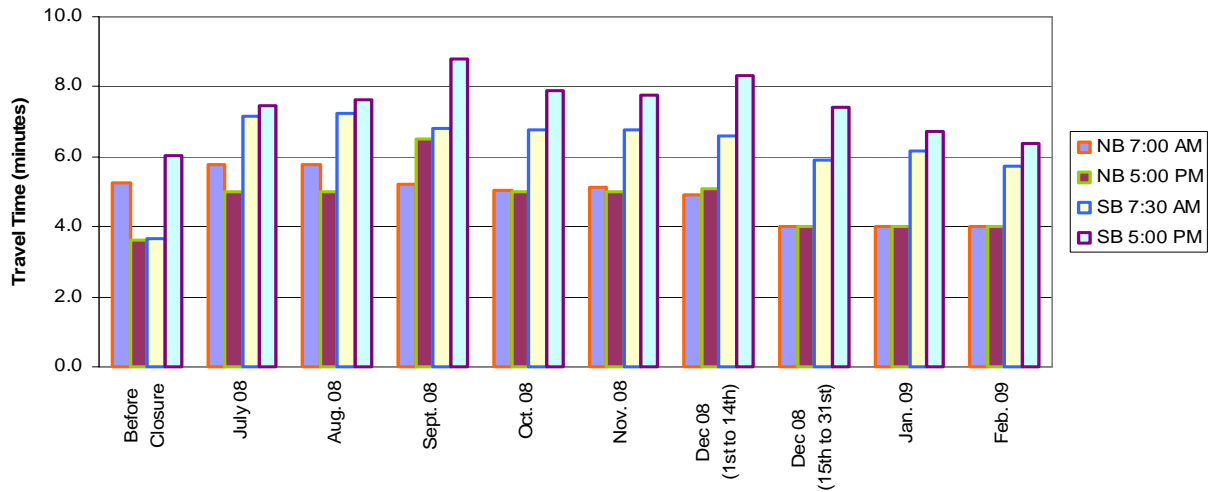


The following chart and graphs shows the travel times along monitored arterial corridors.

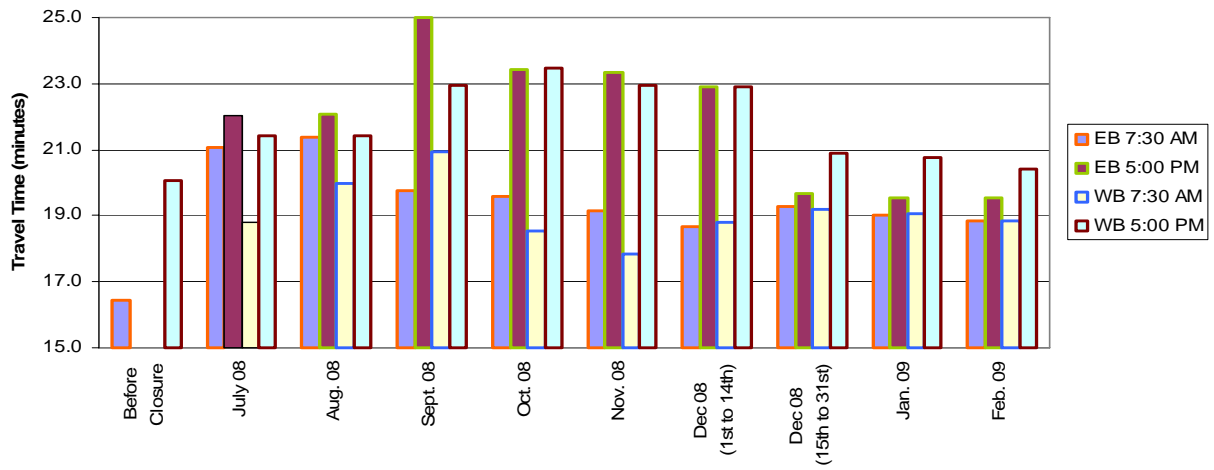
Route	Segment	Direction	Peak Period	Travel Time (Min)									
				Before Closure	July 08	Aug. 08	Sept. 08	Oct. 08	Nov. 08	Dec 08 (1st to 14th)	Dec 08 (15th to 31st)	Jan. 09	Feb. 09
US 61/67	100 to I-64	NB	7:00 AM	5.3	5.8	5.8	5.2	5.1	5.2	4.9	4.0	4.0	4.0
			5:00 PM	3.6	5.0	5.0	6.5	5.0	5.0	5.1	4.0	4.0	4.0
		SB	7:30 AM	3.7	7.2	7.2	6.8	6.8	6.8	6.6	5.9	6.2	5.8
			5:00 PM	6.1	7.5	7.6	8.8	7.9	7.8	8.3	7.4	6.7	6.4
100	Barrett to Hanley	EB	7:30 AM	16.5	21.1	21.4	19.8	19.6	19.2	18.7	19.3	19.0	18.9
			5:00 PM	--	22.0	22.1	25.0	23.4	23.4	22.9	19.7	19.5	19.6
		WB	7:30 AM	--	18.8	20.0	21.0	18.5	17.9	18.8	19.2	19.0	18.9
			5:00 PM	20.1	21.4	21.4	23.0	23.5	23.0	22.9	20.9	20.8	20.4
MO141	I-44 to I-64	NB	7:00 AM	11.7	12.6	14.2	15.0	12.7	13.0	13.4	13.0	13.3	13.6
			5:00 PM	--	12.8	12.9	13.0	12.9	13.5	14.6	17.2	13.1	13.3
		SB	7:00 AM	--	11.1	11.5	12.7	11.6	10.3	10.7	11.9	12.1	12.4
			5:00 PM	14.0	11.7	12.4	14.8	13.2	13.1	13.0	16.1	15.0	15.1
D (Page)	I-270 to I-170	EB	7:30 AM	9.8	9.1	10.1	7.6	8.2	8.1	8.4	8.3	7.9	7.9
			5:00 PM	--	8.7	10.1	9.3	8.9	9.3	8.8	9.4	9.0	9.0
		WB	7:30 AM	--	11.3	11.7	8.6	7.6	7.9	7.8	7.4	7.2	7.0
			5:00 PM	10.6	11.2	11.6	8.5	8.7	8.4	8.9	9.3	8.0	7.9
D (Page)	I-170 to Grand Ave.	EB	7:30 AM	--									17.0
			5:00 PM	--									19.4
		WB	7:30 AM	--									
			5:00 PM	--									

With East closure now in place, we have selected an additional section along Page east of I-170 to monitor. This additional section will be added in future reports to reflect traffic flow along arterials.

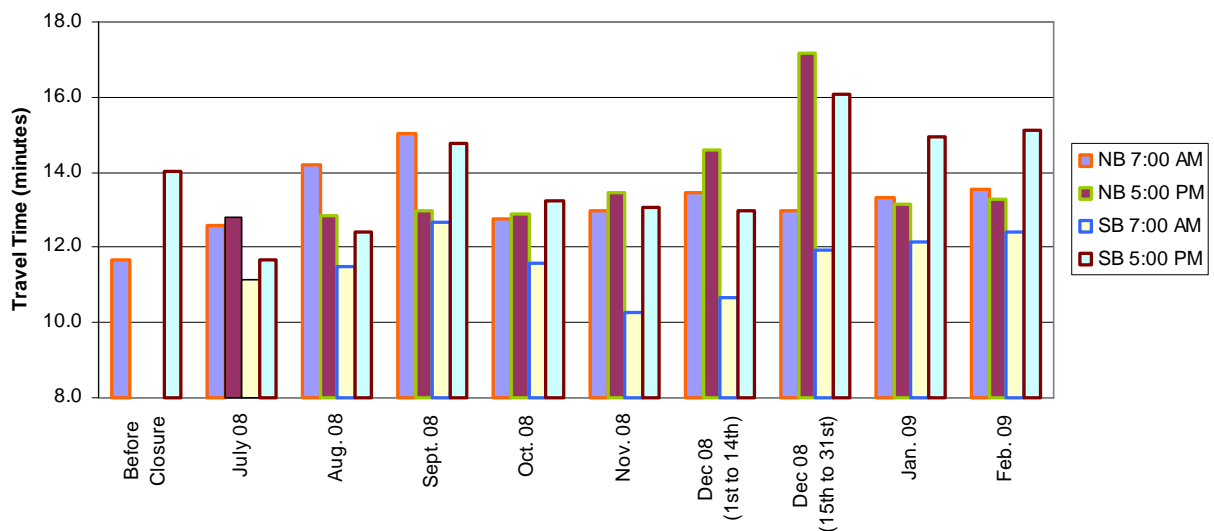
Routes US61/67 - Route 100 to I-64



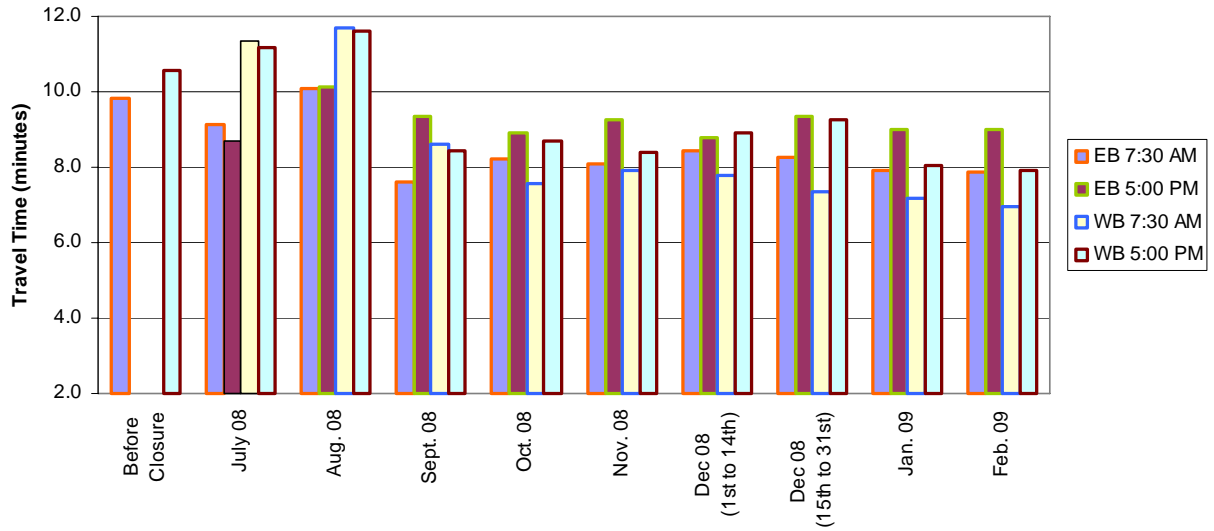
Route 100 - Barrett to Hanley



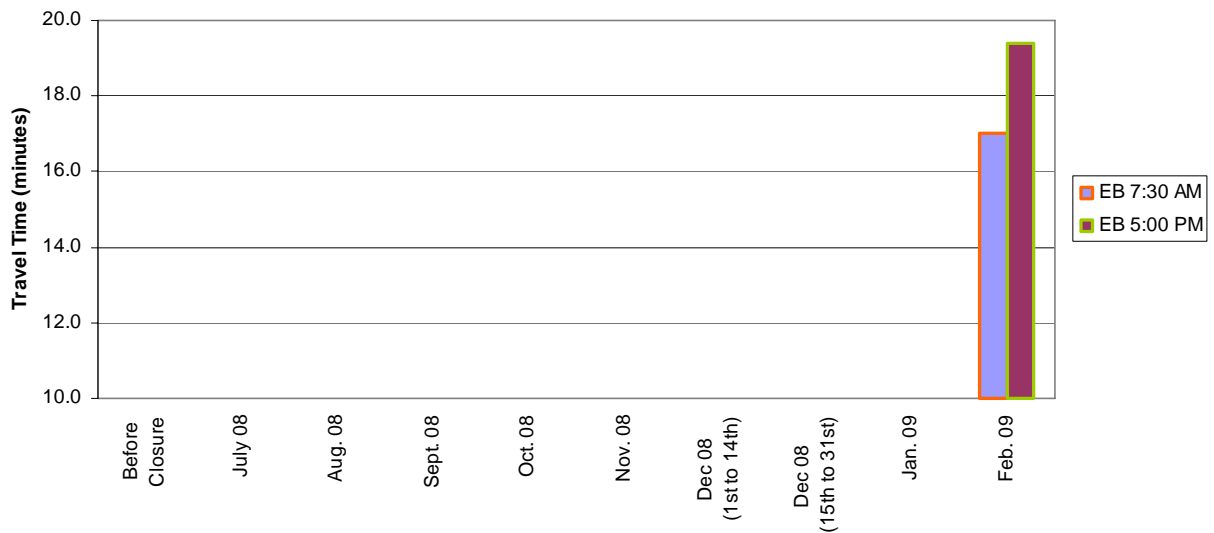
Route 141 - I-44 to I-64



Route D (Page) - I-270 to I-170



Route D (Page) - I-170 to Grand Ave.



4. Economics

The major highlight for this past quarter was the detailed analysis of taxable sales by industry type, and the analysis of the second business survey which is covered in the next section. In addition to the taxable sales data, the third quarter 2008 MERIC QCEW industry employment data was released. Below is an overview of economic indicators for the first three quarters of 2008 by region. Although the third quarter of 2008 does show a dip in employment for both the corridor and non-corridor, this drop in employment is consistent with historical trends. Looming large in any analysis of economic trends in 2008 is the economic slowdown as the nation officially began its current recession in December 2007, according to the National Bureau of Economic Research.

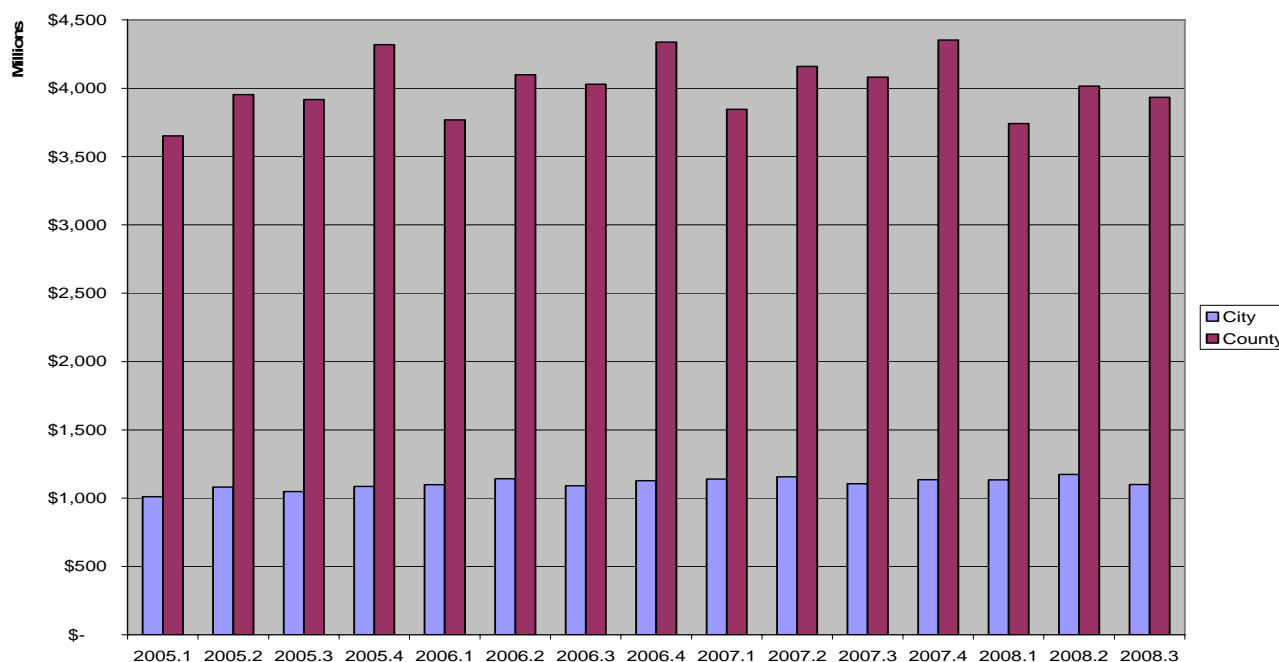
Table 1- Economic Indicators for 2008 Corridor and Non-Corridor Regions

	1st Quarter 2008		2nd Quarter 2008		3rd Quarter 2008	
	Corridor	Non-Corridor	Corridor	Non-Corridor	Corridor	Non-Corridor
Jobs	200,772	616,400	201,577	631,271	200,533	627,295
Number of Establishments	9,232	31,155	9,197	31,131	9,178	31,256
Wages (\$ Millions)	\$ 2,705	\$ 7,413	\$ 2,555	\$ 7,193	\$ 2,453	\$ 7,028
Total Taxable Sales (\$ Millions)	\$ 833	\$ 3,977	\$ 914	\$ 4,226	\$ 888	\$ 4,096

Taxable Sales

The graph below shows the total taxable sales for each quarter from first quarter 2005 to third quarter 2008 in millions of dollars. As Figure 1 indicates, the taxable sales for St. Louis County are roughly three and a half times larger than the taxable sales for St. Louis City. For the third quarter of 2008, the combined taxable sales for the City and County of St. Louis were just over \$5 billion. When compared on a year-on-year basis the third quarter 2008 taxable sales revenues dropped \$151.8 million dollars from the third quarter of 2007.

Figure 1- Taxable Sales for St. Louis City and County in Millions of Dollars



The following is an analysis of the taxable sales for select major industry categories.

Retail

Each year, retail sales follow a quarterly cycle where the lowest sales take place in the first quarter of the calendar year, the second and third quarter show some degree of recovery, and then the final quarter of the year has the largest sales which are traditionally boosted by holiday spending. Total retail sales for the third quarter of 2008 are slightly down from the second quarter of 2008 for both St. Louis County and St. Louis City, consistent with retail sales trends. Figure 2 and Figure 3 show the growth of various key retail industries. The most notable is the sustained growth in taxable sales for General Merchandise stores for St. Louis City, whereas the County shows much more dramatic variation and actually has negative growth for the first quarter of 2008. In addition, the miscellaneous retail stores show the most dramatic decline for the City starting in early 2007, followed by the County in the first quarter of 2008. As expected, the taxable sales for food stores remained steady and showed positive growth throughout the entire period. Eating and drinking establishment sales continued to grow between the first quarter 2008 and the second quarter 2008, but declined in the third quarter. At the same time the taxable sales for food stores increased for both, suggesting a possible shifting of consumer spending away from eating out at restaurants towards purchasing groceries.

Figure 2 City Retail Taxable Sales Index

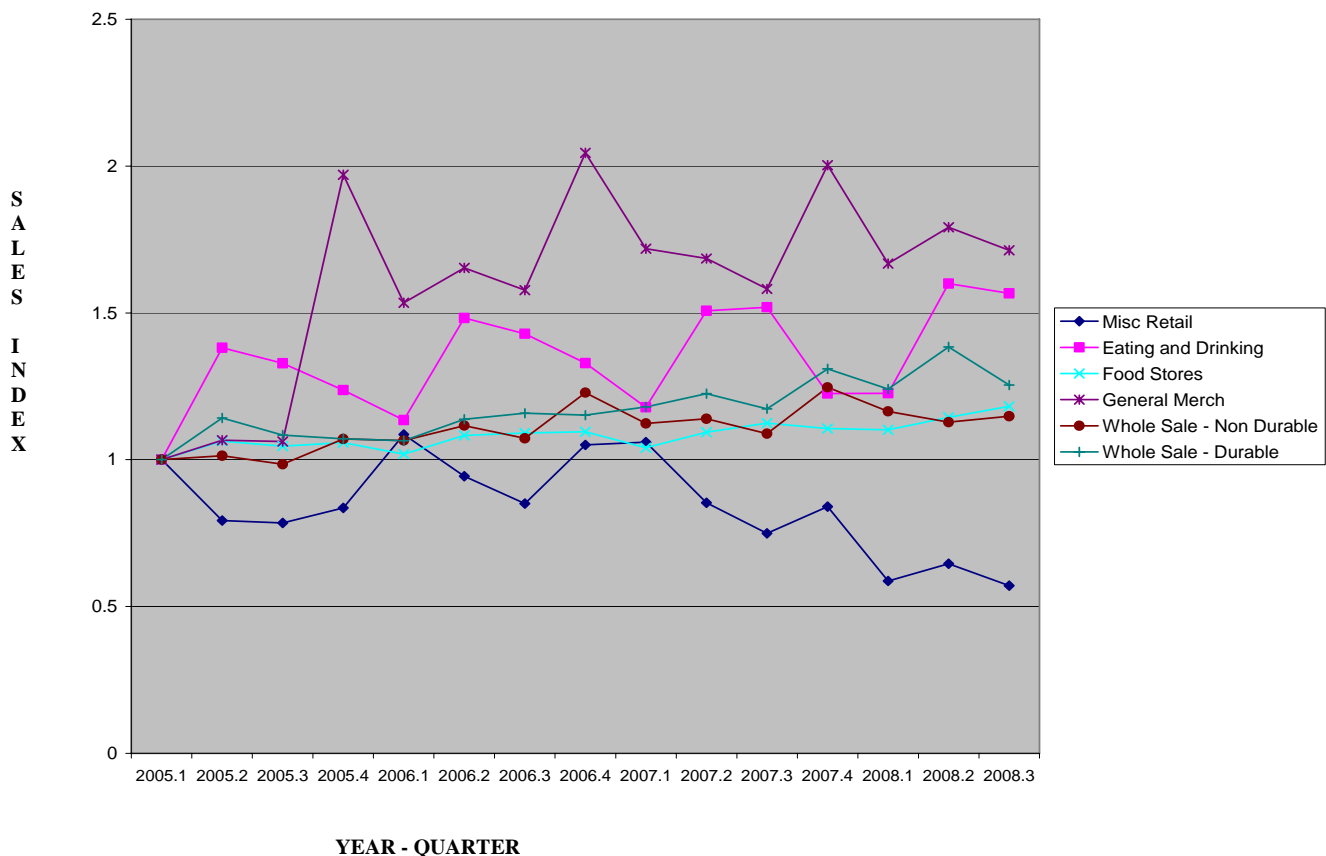
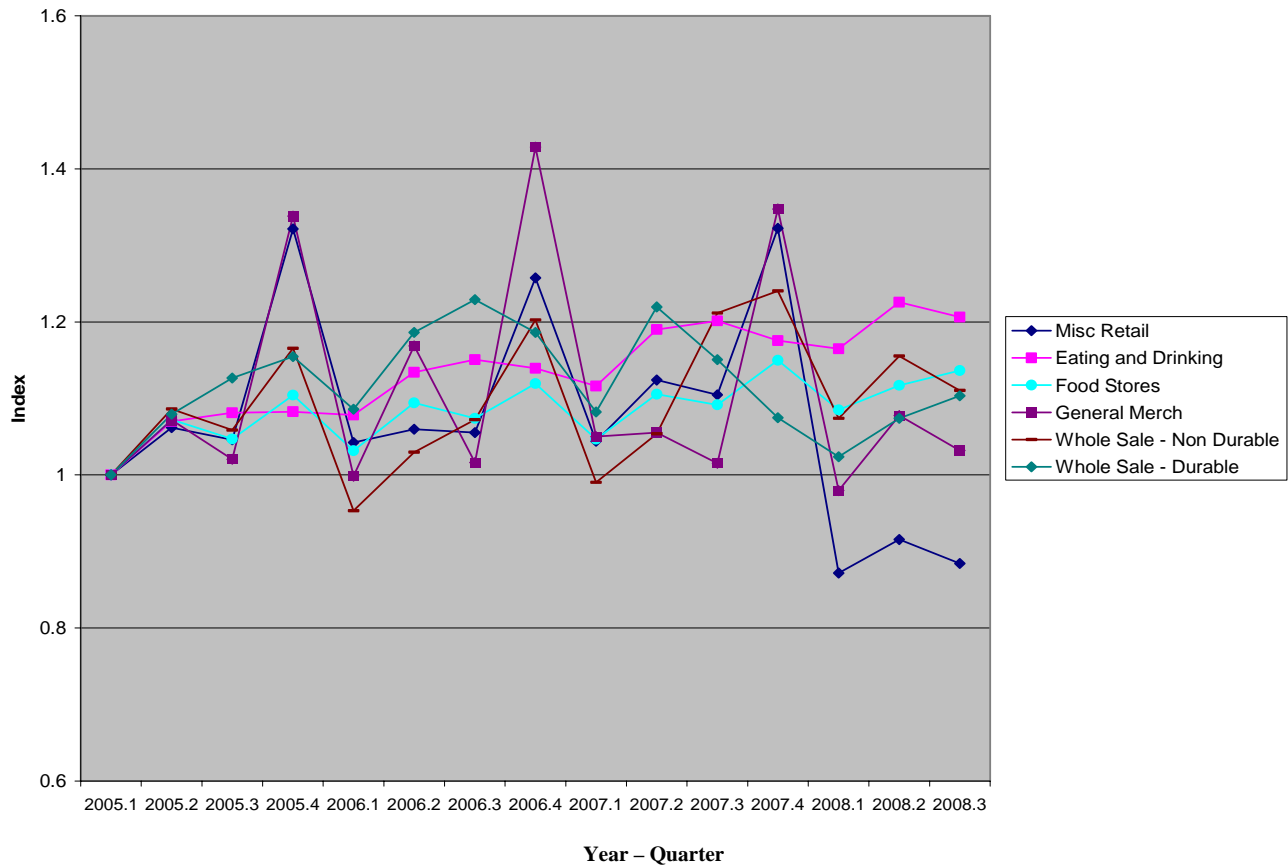


Figure 3 County Retail Taxable Sales Index



Construction and Real Estate:

Like the rest of the nation, St. Louis City and County exhibited high levels of growth in residential and non-residential construction from 2006 through most of 2007. Although residential and non-residential construction sales and growth are tapering off, they still have not returned to levels below those in 2005.

Figure 4 and Figure 5 below represent the taxable sales growth from first quarter 2005 through third quarter 2008 for construction and real estate related industries. As the figures show, the residential and non-residential construction taxable sales for St. Louis City grew at an accelerated rate when compared to the County. While residential and nonresidential construction has seen rapid growth through most of 2007, specialized construction has exhibited more stable slow growth. In terms of direct dollar amounts, specialized construction total taxable sales were roughly ten times greater than residential and non-residential construction, which accounts for some of the variation when comparing the City and County. St. Louis County's real estate growth, also consistent with national trends, demonstrated periods of growth up to early 2007 and has remained relatively flat as shown by Figure 5. St. Louis City's real estate sales have demonstrated negative growth since second quarter 2005.

Figure 4 City Construction Taxable Sales Index

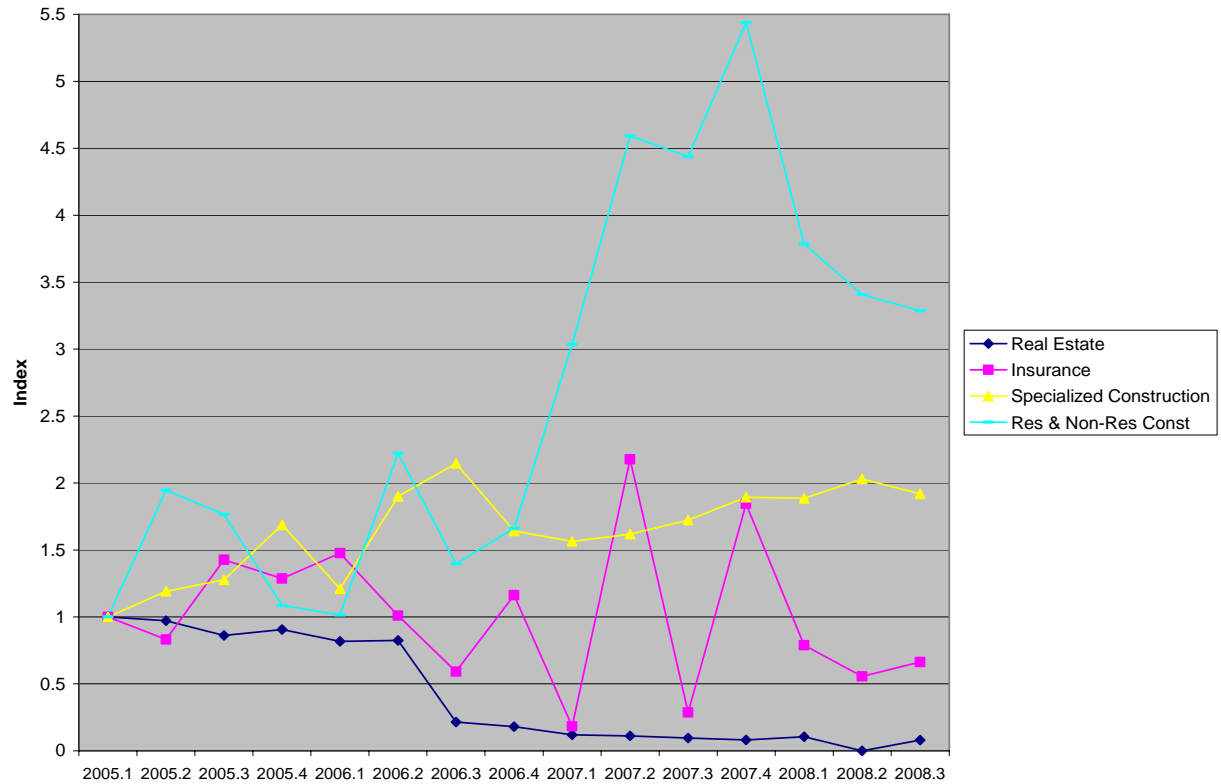
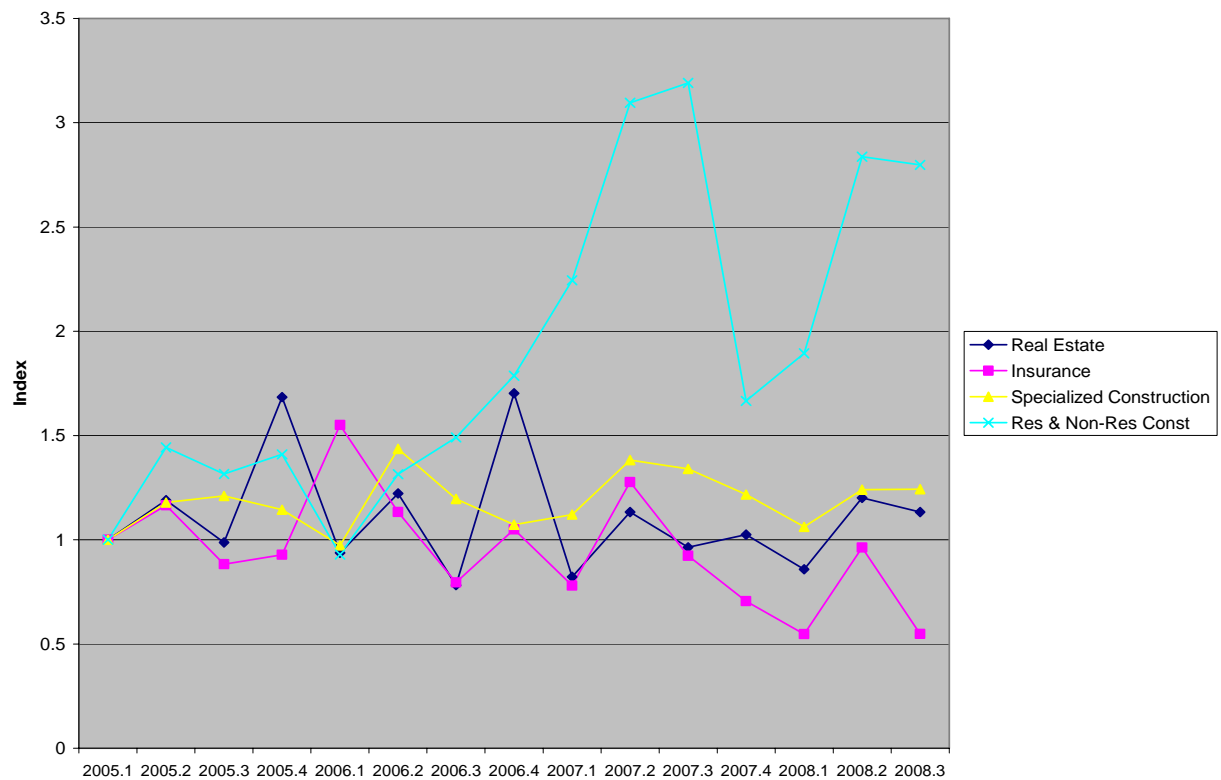


Figure 5 County Construction Taxable Sales Index



Second Business Survey – Major Findings

1. Background

On January 2, 2008 the western section of I-64 from Ballas Road to I-170 was completely closed for reconstruction and reopened December 15, 2008. Following the reopening of the western portion, the eastern section of I-64 between I-170 and Kingshighway Boulevard closed for construction for the bulk of 2009. This report is an analysis of the second business survey responses collected from the period beginning November 5, 2008 and closing on January 16, 2009 thus focusing on the transition from completing the western section of the I-64 closure and anticipating the effects of the eastern closure. The survey itself is part of an ongoing effort to periodically evaluate the economic conditions related to I-64's closures, in particular, how the closures are impacting business performance and the methods businesses are taking to cope.

The primary focus of the business surveys are:

- commuting impacts on local businesses and employees
- transportation and shipping costs on local businesses
- sales, visitation and economic activity for St. Louis County, St. Louis City, and the areas surrounding the reconstructed sections of I-64

Compared to the first business survey, the response rate for this survey was much smaller, and therefore makes some of the comparisons between surveys difficult at a more detailed corridor level. The second business survey received 84 responses compared to 169 in the first survey. The research team attributes this reduction in completed surveys to: a) business complacency/acceptance regarding I-64; and b) larger economic concerns regarding the recession. The remainder of Section 1 provides a summary of business survey results with greater detail provided in the remainder of this analysis.

1.1. Summary of Respondents and Overall Satisfaction

- Based upon these survey results, 34 businesses (40%) are located within the I-64 corridor¹. This is 41 fewer (55%) businesses than in the previous survey.
- Similarly 88% (86% previously) of the businesses that completed the survey are located within 10 miles of the I-64 Reconstruction Project.
- An overwhelming 96% of all respondents were satisfied or very satisfied thus far with the performance of the alternative routes to I-64. This is consistent with the first survey.
- 96% were satisfied or very satisfied with MoDOT's delivery and execution of the I-64 Project.

Business Survey – Selected Preliminary Results	
Total Distributed	6,000+
Total Responses	84
Respondent location (based on zip code, reported by 100%)	
Immediate I-64 region	40%
Satisfaction w/ MoDOT execution of project	
Very satisfied	56%
Satisfied	40%
Dissatisfied	4%
Very dissatisfied	0%

¹ Defined as the 9 ZIP code area containing I-64's Western and Eastern reconstruction zones

1.2. Summary of Survey Results from Three Key Areas

Commuting Impacts

- The majority (56 percent) of businesses are experiencing limited effects on employee commuting behavior due to the closure. 32 percent of the respondents indicated noticeably earlier or noticeably later commute times.
- 81 percent of businesses surveyed are or have implemented new commuter benefit programs. Of the programs offered, flex time programs were the most popular at 36 percent, followed by 17 percent of businesses encouraging car/van pooling, and 10% of respondents subsidize employee's public transit expenses. The large number of businesses who have implemented new commuter benefit programs may be correlated to "self-selection" as the businesses who are the most actively engaged in this type of activity may also be the ones most likely to respond to a survey on I-64.
- Only 14 percent of the respondents surveyed reported a significant increase in commute time or cost. The majority (57 percent) of businesses reported a minor increase in commute time or cost.

Transportation Costs and Business Sales/Visitation

- Almost half of the businesses (46 percent) near the reconstruction are experiencing an increase in transportation costs. Of those businesses experiencing an increase in transportation costs, 49 percent reported an increase in freight shipping costs and another 46 percent cited an increase in travel time and delay.
- Despite 46 percent of businesses reporting an increase in transportation costs, only 1 business claimed to participate in the MoDOT outreach grant program.

Sales, Visitation and Economic Activity

- 17 percent of all businesses cited a lower volume of weekly sales. Interestingly, a greater number and percentage-share of the *non-corridor* businesses selected this answer.
- A slightly larger portion, 21 percent of all businesses, described a lower volume of weekly visitors or customers. Again the non-corridor respondents articulated a greater loss than the corridor businesses.

2. Profile of Businesses Responding

As in the previous survey, businesses within St. Louis City and St. Louis County were targeted for the survey. The objective of this analysis was to see how the business conditions have changed after the western portion of I-64 was closed. Each closure will alter route choice and potentially impact shipments, commuters, and sales/customers. The specific questions were geared towards business size, type, commuting patterns, and ZIP code to determine how proximity to the closure and other characteristics are impacting businesses.

Through arrangements with local economic development organizations, the survey was distributed to member business establishments via e-mail and newsletters with reminder notices urging members to

Figure 6: I-64 Corridor and Major Highways



participate in the online business survey. A combined distribution list was created including 6,000 contacts from the five economic development organizations that included 3,600 different businesses. The 6,000 entries represented the total number of individual contacts in the combined distribution list. It is important to note that the distribution list included a number of duplicate entries, which are attributable to businesses being members of multiple organizations, invalid contact information, and multiple contacts from the same business. Previous web based surveys have reported failure rates for survey invitations reaching potential respondents as low as 1% to 5% in well defined samples and as high as 7% to 17% in less than well defined samples². Therefore the final number of people receiving the survey e-mail was likely less than 6,000. The following organizations contributed to the survey distribution:

- St. Louis Regional Chamber & Growth Association (RCGA)
- Regional Business Council (RBC)
- Downtown St. Louis Partnership
- Civic Progress
- St. Louis County Economic Council (SLCEC)

84 separate and complete responses to the survey were submitted. Although this is less than 10% of the total distribution list, we must keep in mind there were additional obstacles that inhibited participation and completion of this web based survey including: e-mail address spelling precision, spam filters, and internet content blockers. In addition, the strongly favorable responses in terms of the I-64 project probably contributed to reduced interest in completing the survey.

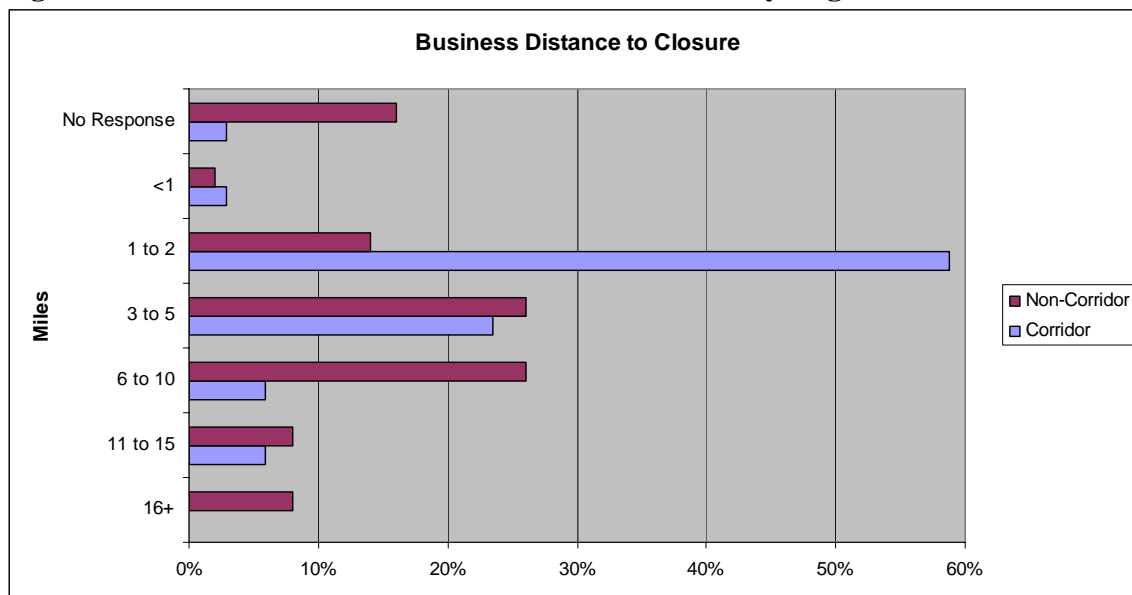
2.1. Distance and Location

On a percentage basis, the businesses responding were fairly uniform in terms of the industry type and the number of employees. Of businesses responding to the survey 60 percent are located outside of the corridor area, while the remaining 40 percent are located in the corridor. The “corridor” has been defined as the 9 ZIP codes that the impacted sections of I-64 either touch or intersect. The first business survey did have a greater response rate which could be attributed to the concern from businesses and residents prior to the western closure. The relatively high representation of Corridor based businesses taking the first survey could be indicative of their close proximity and relationship with the closed sections of I-64, possibly prompting and motivating such businesses to complete a survey. Respondents were asked how close they were to the western closure in miles, and 77% of the total businesses responding are within 10 miles of the Western Closure.

Figure 7 shows the business distance from the closure by region; please note that the low response rate might be influencing distance categories.

² Manfreda, Katja Lozar & Vehovar, Vasja “Survey Design Features Influencing Response Rates in Web Surveys” University of Ljubljana

Figure 7: Business Distance to Eastern Closure of I-64 by Region



2.2. Business Composition

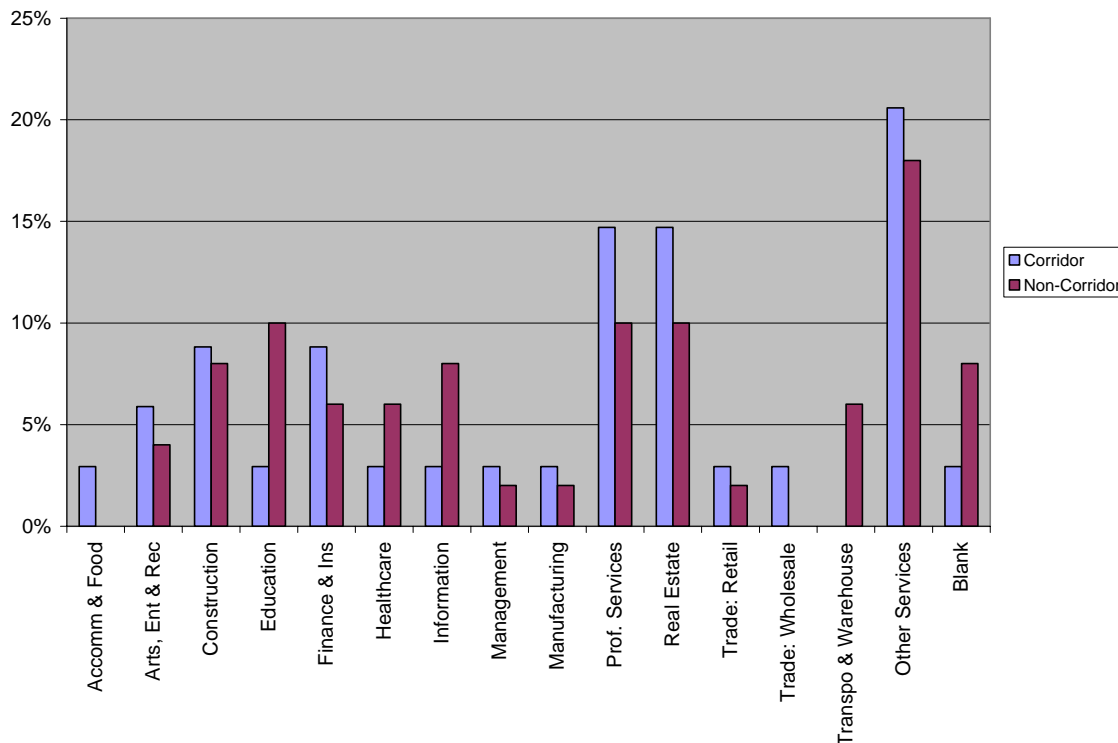
The businesses responding share fairly uniform characteristics in terms of business size, type of business, and employee behavior. 28 percent of all businesses reported having between 26 and 100 employees; while 16% of all businesses responding within the St. Louis area reported over 250 employees, both of which are within 4 percentage-points of the first survey. The strong response from larger businesses can be attributed to some of the outreach efforts targeting large firms and the potential for larger firms to have greater resources to complete the survey. However, the response by businesses with up to 25 employees should not be ignored as they are 46 percent of the total respondents. To place these results in context, the businesses located within the corridor provide 24 percent of all the jobs in St. Louis City and St. Louis County. The total number of jobs within the corridor as of third quarter 2008 was 200,530³.

The industry mix of business respondents was similar to the first business survey where the predominant industries were: professional, technical, and other services. All transportation, warehousing, and manufacturing businesses are located outside of the corridor. The businesses within the ZIP codes that make up the corridor have a higher concentration of service based industries relative to the rest of the region, for example: health care, finance and insurance, and real estate. Health care services for the corridor represent a large share of the total health care employment for the region, accounting for 47,980 jobs.⁴ Although there was a high response rate from professional services, professional services represent less than 10% of the actual employment for the St. Louis region.

³ MERIC special QCEW data request, third quarter 2008

⁴ MERIC special QCEW data request, third quarter 2008

Figure 8 Percent Businesses by Industry and Region Responding



3. Impacts of I-64 Closure

3.1. Previous Use of I-64: Business Survey

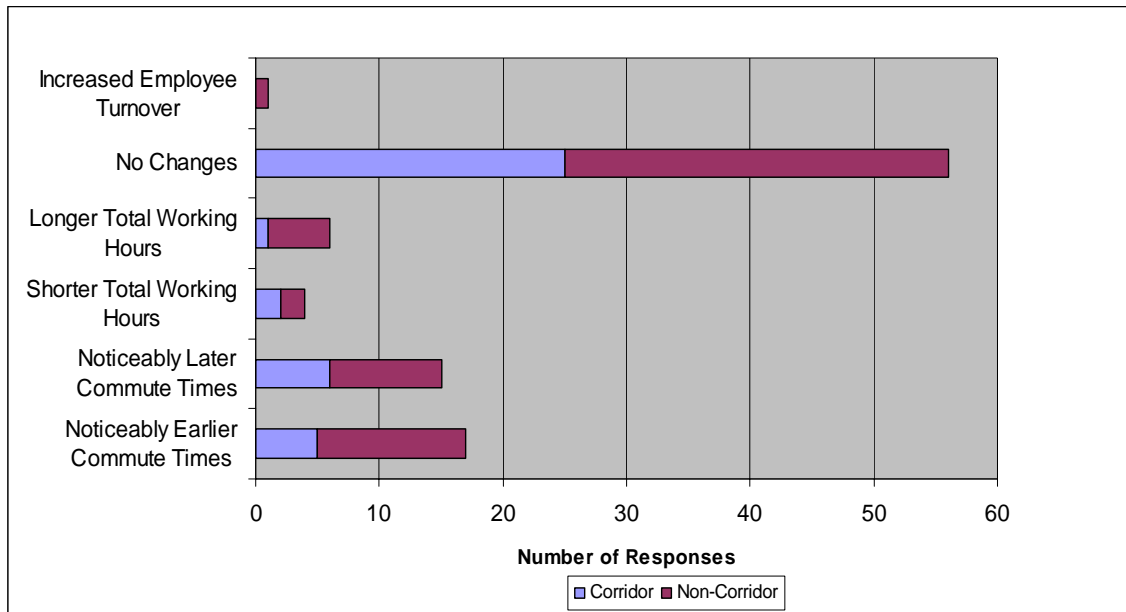
Over half of the businesses (both corridor and non-corridor) surveyed responded that a low share of their employees (0% to 25%) used I-64 as a primary route for their commute prior to closure. As anticipated, the corridor businesses reporting the greatest number of selecting the category of 26%-75% of their labor force use I-64 for commuting.

3.2. Post Closure Commute

Respondents were asked exactly how employee commute behavior has changed since January of 2008 (Western section closed). The results were consistent with the first survey both corridor and non-corridor businesses responding found no major changes (see Figure 9).

Figure 9The most frequently noted change was employees shifting their commute times to either earlier or later in the day. Coinciding with this trend, 36 percent of businesses offered flextime arrangements for employees with another 7 percent offering telecommuting options to mitigate the effects of I-64 reconstruction. The most dramatic shift since the first business survey was the decline in businesses offering telecommuting. This shift could be due businesses overestimating the anticipated impacts before the closure and the perceived impacts after the closure being less disruptive. In addition, only one business reported increased employee turn-over, consistent with the previous conclusion. However, employee turn-over will continue to be monitored over the coming months, but could be difficult to isolate the direct cause given current national economic conditions.

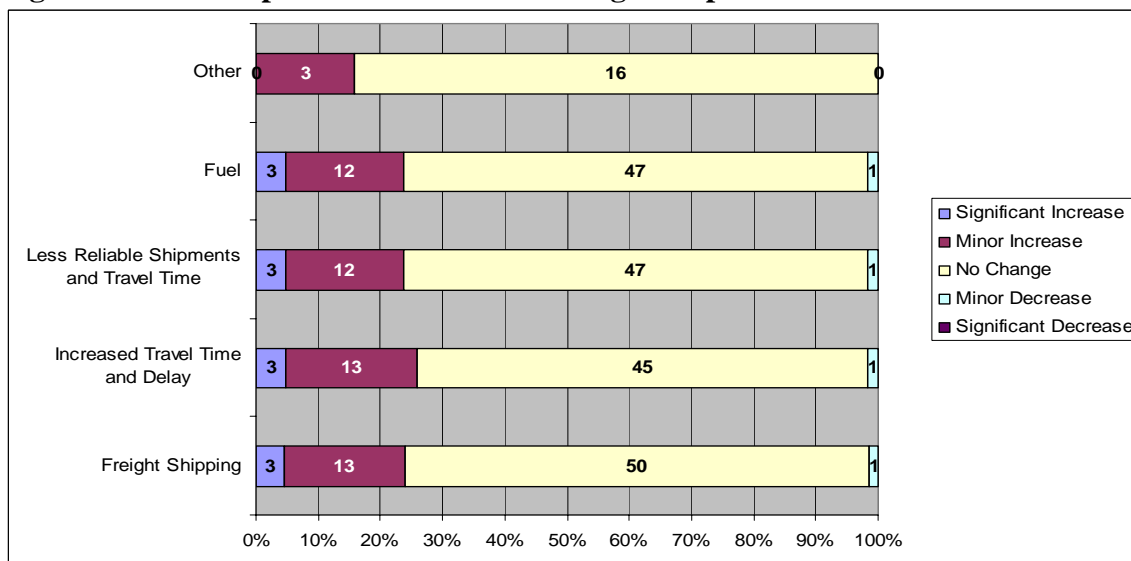
Figure 9 Closure Impact on Employee Behavior



3.3. Transportation Costs

Although the measurable commuter impacts to business respondents were relatively minor, respondents consistently noticed an increase in transportation costs. The first survey found a majority of respondents experienced a noticeable or minor increase in costs related to time travel and delay. Not surprisingly, the second survey respondents noted a rise in fuel costs, but this can be only indirectly related to I-64. While the rise in fuel costs per unit is apparent, the actual impacts related to I-64 are a result of longer distances traveled through detours around the closure or by an increase in stop and go traffic conditions. Reliability and travel delay are the major sources of the perceived transportation cost both exceeding the change in freight shipment costs. Corridor-based businesses reported changes consistent with businesses outside of the corridor, often to a lesser degree, especially in the case of freight costs. The industry mix is likely responsible for these differences.

Figure 10 : Respondents feel the following transportation costs have...

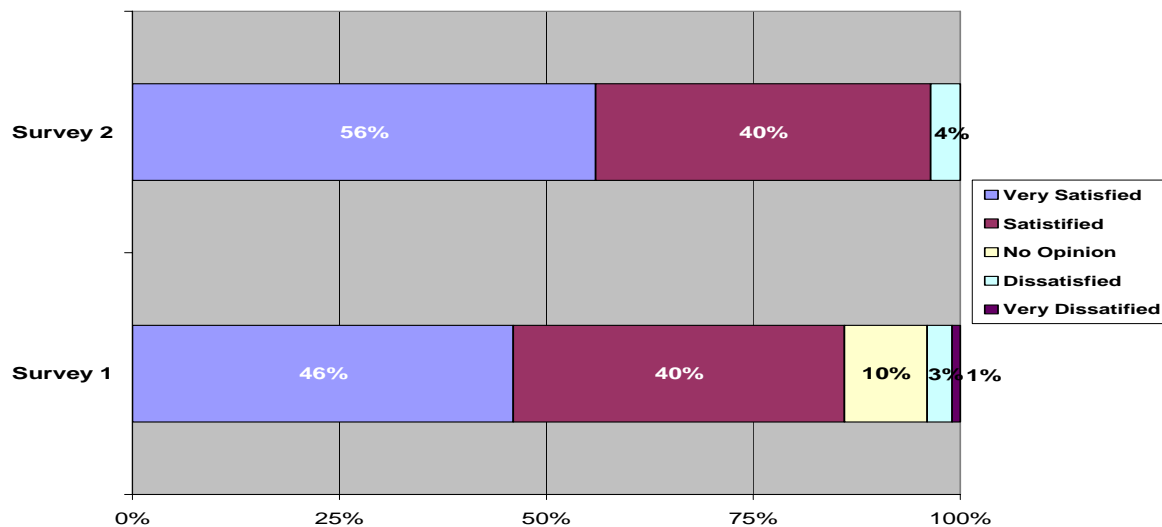


In the first business survey Manufacturing, Wholesale Trade, Transportation & Warehousing, and Utilities industries were assessed separately as they tend to have a greater reliance on freight shipments. Of the 36 responding shipper-based businesses, only four were located within the corridor. Like the total businesses, just over half the shippers agreed that costs were increasing⁵. Travel time costs were cited as the most significant cost increase for shippers. For the second business survey less than 6 businesses were from these industries and their answers were not sufficient to draw any conclusions.

3.4. Satisfaction

Following the closure, the level of satisfaction with the performance of I-64's closure and alternative routes were very high, especially when considering the number of businesses experiencing at least a minor rise in transportation costs. The response was almost identical across all regions as 86% or more felt that the alternative routes for the Western Closure provided reasonable access. The second business survey found that 96% of those responding were either satisfied or very satisfied.

Figure 11: Satisfaction with I-64 Performance



The results indicate (Figure 11 above) that despite a rise in cost attributable to an increase in travel time, businesses are coping with the closure and to a large extent satisfied with the project delivery and mitigation thus far. Although there have been proactive steps made by MoDOT and many of the local businesses, the sentiment still seems the same: travel delays and costs are higher but not enough (at this point) to implement drastic changes or cause major impacts. This conclusion is consistent with the finding of the first businesses survey that a small percentage of total businesses surveyed enrolled in MoDOT sponsored outreach programs; with only one enrolled from the second business survey.

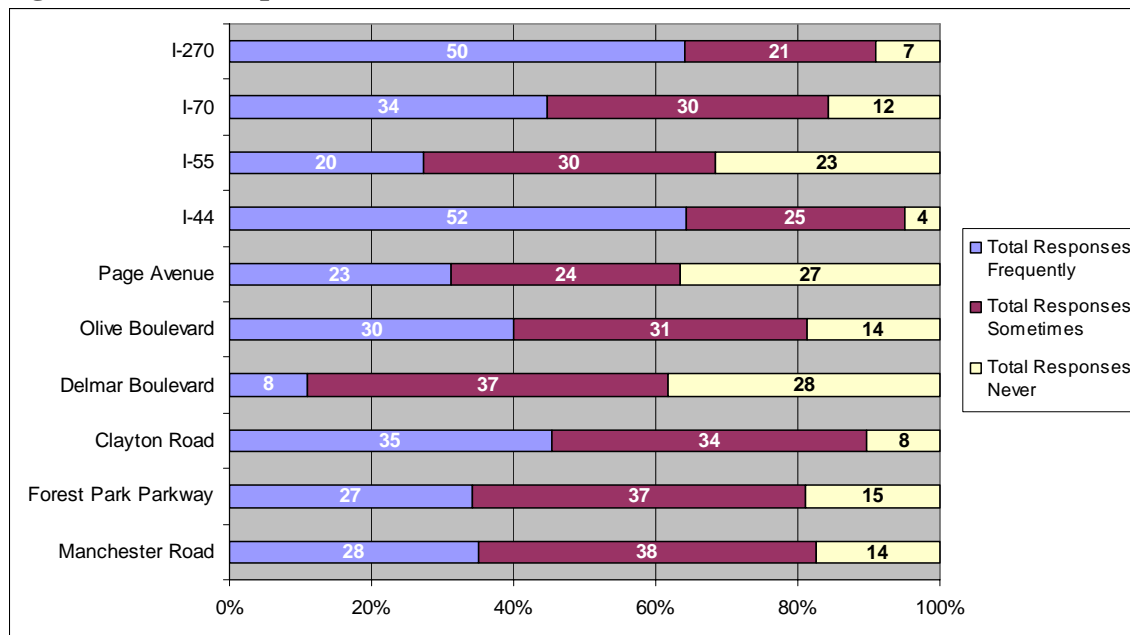
3.5. Sales and Visitors

Customer's route choice was generally spread evenly between all alternative routes for the entire region. The lone exception was I-55 where users would be coming from either the east (Illinois) or the southwest, avoiding St. Louis County and the Western-most portion of St. Louis City, thereby completely bypassing I-64 and most other alternative routes. The customers traveling to

⁵ These results should be considered carefully as isolating this group of businesses significantly reduces the number of observations.

the corridor predominantly used I-44 for East-West travel, Clayton Road for Northern East-West Travel, and I-270 for North-South travel at the mouth of the Western I-64 closure.

Figure 12 Comparison of Customer Routes: Total



Similar to the first business survey, over eighty percent of businesses reported the change in customers, visitors, and patients were either not relevant or not noticeable. However, 17% of responding businesses (down from 20%) did report a decline in visitor, patient, and customer volumes compared to previous seasons as seen in Table 2. The change in sales volume follows the same trends as the visitors, patients, and customers. The majority of businesses, 65 percent of the corridor and 40 percent outside of the corridor, are experiencing no noticeable decline in sales, compared to previous seasons. See Table 2 for a breakdown of changes in weekly sales and customers.

The level of awareness remains high despite the majority of businesses reporting no change in customers or sales. Looking ahead, 8 percent surveyed said that future decisions on investment, expansion, or location of the facilities and operations will be impacted by the closure of I-64. The decline in sales and business activities will be researched further and discussed at greater length in the future reports. Part of the future considerations will have to address the overall economic conditions impacting St. Louis and Missouri beyond I-64's improvements.

Table 2 Change in Weekly Sales & Customers

	Sales	Customers
Lower Volume	17%	21%
Higher Volume	1%	1%
No Change	58%	54%
Not Relevant	24%	24%
Total	100%	100%

4. Conclusions

The overall economic impacts measured in terms of jobs, sales and business perceptions thus far appear to be modest, with a few exceptions, and the overall level of business satisfaction with the I-64 reconstruction project is high thus far. Businesses are coping with higher transport costs mostly attributable to travel time delays, and seem to be less concerned with the closure than in the first business survey. In the coming months, economic data and future surveys will provide a better understanding of the economic impacts in terms of:

- a) the magnitude of transportation costs and its impact on productivity and competitiveness;
- b) reduced volumes of retail sales, customers, and visitors especially to Corridor businesses;
- c) measures businesses are taking to mitigate or cope with the I-64 closure, such as flex-time and telecommuting; and
- d) the magnitude of which national economic conditions are influencing the results.

5. Traffic Response

The draft report is attached in Appendix D. Information will be discussed and finalized.

Appendix A: Communications Data

- **Online Summary of Comments**

Appendix B: Mobility Data

Appendix C: Economic Data

Appendix D: Traffic Response Data

- **Draft Report**

Summary of Initial Online Comments to Eastern Closure

A supplement to the March 2009 Quarterly Report

Respondents were given multiple opportunities to provide comments in the online survey. Each opportunity corresponded to a different part of the survey.

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Satisfaction Comments.....	7
Alternative Route Comments	13
How to Contact Comments	16
Alternative Website Comments	18
I-64 Project Website Comments	19

Impact of Closure Comments

The following comments were left in response to the statement *If you want to provide more details about how the closure has affected you, please do so here.* The comments are presented as they were received.

This part of the closure hardly affects me at all. The other part significantly affected me.

I think the workmen did a great job , the only thing I do not like I can't see 40 from my window at WORK .

During the eastern closure, I will be using the Forest Parkway route, as I live by the Mall at Brentwood and Eager Road. Unfortunately, Highway 44 is too far out of the way south of me to use for commute to work.

I am a Muny season ticket holder, and I'm concerned about the eastern half construction will effect my commute to the Muny from the Chesterfield area.

Takes a few minutes longer to get from HiPointe to the Richmond Heights P.O. or Sam's Club. Not that big a deal yet.

We live near 270 and Ballas and work near 40 and Kingshighway in the CWE. Before, we traveled East on Olive and took 170 South to 40 East to the CWE. Now, we plan on traveling South on Lindbergh to 40 and taking Forest Park Parkway to the Clayton Metrolink station, toward the CWE. Even though the travel time may not change, enjoying the new highway will be a treat!

I go to work later to avoid the traffic and work later to avoid the home traffic. I will also limit greatly going out with my friends in St. Charles/West county. I have rescheduled business meetings in West/North county to make them closer to my home in South City. I am also going to travel by train to KC & CHI so that I can park in the city and not drive to the airport. North STL driving at night when I am a single woman is not a smart idea with inclement weather.

today 12/16/08 they changed the time of the lights at forest park parkway and skinker and traffic on skinker was horrible. There was bumper to bumper traffic from 1/2 mile south of wydown until you crossed the parkway. And southbound was backed up past Olive. I understand that you need to improve the traffic flow on forest park parkway, but do not cripple the north and south bound routes. What is going to happen on roads like Skinker when Hanley is closed?

At MODOT's suggestion took Page this morning (coming from St. Charles) all of the way to Kingshighway. The street was not plowed past I-170. So to get to WU I should go N on 170 and get off where? FPP is past capacity. If a road is going to be recommended as an alternate route then it should be maintained

I think MoDot attempts to spin that drivers shouldnt take the Parkway are a waste of energy. The fact is that most believe the sit time there is less than the sit time to get to all of the alternates you suggest. It will be the headache until the east side is completed. As we have all ready the county to the city is like a funnel and with the amount of business community traffic along with heavy residential there is simply no way it cant be more of a headache than the west side was.

I still have not found a safe route all the streets are closed or way out of my way of the places I need to go, it really hurt that Oakland also closed to skinker. Today was awful and had car trouble sitting in the long traffic lines. I had to cut off onto a side street and then that street didn't go thru had to turn around, ended up on Big Bend and tons of traffic...there was no safe clean streets to go.

Up until the eastern half closure, my job was terminated, so I no longer commute east of I-170.

The eastern closure has killed St. Louis traffic. The first few days were worse than the worst day of the western closure ever was. There is no path from East of 270 to downtown. With the western half you could drive Clayton all the way down and it took less time than driving out to 270 and around to 44. Now there is just no path. There are no roads that go all the way down town. Manchester is a joke as you cannot get by Hanley without a 20 minute delay at Hanley. Once by it you are again stuck in 2 places. Forest Park Parkway cannot handle the load Clayton did and is a mess. There is just no path. This brings up the question of why Clayton to Kingshighway in front of the zoo is closed. All you are going to do is repave it. This can be done with it open. 200% of your effort should be in getting this short eastern most section of phase 2 open. In fact you should open 1 lane east and west that would stay open during the entire project. This would solve your current crippling of St. Louis!!!!!! With this section closed Clayton is lost as a means to get downtown. With this open you gain 2 lanes all the way.

It is more like 40 mins earlier but you don't have an option for that.

Highway 70 traffic has been negatively impacted - the reversible lanes need to be utilized the way they were intended - eastbound in the morning and westbound in the afternoon.

Unable to shift commute times due to children's school schedule.

There are NO main thoroughfares from the south/east direction on I-64 all we have are city streets and Forest Park Parkway, which is a disaster and we were told not to take after the first day that 30% (your calculations) went that way. I have yet to spend less than 1 hour 30 minutes one way in my commute to work when it typically took 35-40 minutes. I went several ways in an effort to find the best way before the closure, and NO WAY came close to my normal travel time. MODOT stating that all is going good is far from the truth!! Why don't you survey some of the actual drivers on the road. I work with 10 others and all have the same opinion and travel time added to their day. The north/east at least had Page, Olive, Lindbergh we have city streets with tons of lights!!

I take Forest Park Parkway to I-170 in the am, I commute opposite the main flow (west bound), so not many issues except at FP Pkwy and Big Bend.

It's ridiculous that drivers are advised to change their work hours; "shift your commute time." Most employers are not that flexible or can't allow workers to change their hours. I work in the health care industry and have patients who

would be negatively impacted by such a change. MODOT is so out of touch with the day to day reality of workers, it's insulting!

I'm a real estate agent, so I work at all hours, travel most roads. I have to schedule longer drive times to be sure I'm on time.

We travel from Zip 62062 to School in 63131 and then I travel to work in 63103. No matter how you slice it ... it is a bad commute everyday.

I live downtown and I am still trying to find a good route to Westport. Page is good, but I do not feel safe, especially in the evening. The number of open businesses, not counting liquor stores, is minimal, the traffic lights are not synced, and I find myself sitting at red lights with no cross traffic. Why aren't those lights flashing? Also, when using the Forest Park Parkway, there are no signs for where the next gas station is. The first half was bad, but this closure seems to be MUCH WORSE. I wonder if the spokespeople for this project really know how/where St Louisans live and work, also do they understand why Page Ave is under utilized? Mr Waelterman should take this route and see how safe he feels, and consider whether he would like his wife to take that route at 7 pm.

it seems that everywhere you go the stop lights are always red, and the people who don't go the speed limit in the left hand lane block the road. (they are usually on the phone)

I feel it was a poor choice to close Oakland at the same time that the highway closed. Surely, this could have stayed open until the highway was back up and functioning. This only caused more headaches and travel problems. I do not feel this project was well planned at all.

Although we live in the county, we did a lot downtown. The only things we do now are things we have to do for the kids--Upper limits, but other than that, we're avoiding it. The biggest impact has been McKnight Rd. It has always been congested going North getting to highway 40, but now is worse than ever. There is a stop sign at a neighborhood right before you get to the highway that seems to really slow things down. For the last few days it has been backed up well past Litzinger. It's unfortunate because I just need to get to the interbelt and I was really looking forward to getting to it from McKnight.

I can now travel on the new section of 40 to get to work instead of up and down Clayton Road.

The closure may affect my social life to a degree, but I know it's temporary. Keep up the good work

I have always taken I-70 to commute to work. Traffic on 70 did not seem to be effected in the first closure, but the recent closure has effected traffic. I have a hard time understanding why the express lanes are not opened eastbound on 70 in the mornings and westbound in the evenings?

you have cut out all my "short cuts" and "secret ways", i.e. oakland to mackland to weise (thank you!!!!!!!!!!). It is very difficult to get about, and just recently you stopped people being able to travel both ways on Berthold! I am still able to get

to the areas I need to go to or want to go to, but what would take approximately 10-15 minutes, is now taking 1/2 hour to an hour.

vist the area 2 times a month. difficult finding routes when not entirely familiar with area. Would like to see a mapquest type program to assist.

I now do not leave my house until 8:15 to 8:30 becausue of the tie ups on southbound I-170

Because I travel North in the morning and cross I 64 somewhere between Big Bend and Hampton, I must route around the street closures. Not a real big deal until Hanley AND Big bend close at the same time.

I now have to leave about 30-45 minutes earlier than before. Now that the second half of 40 has shut down, things are EVEN WORSE than 2008. Did anyone think this project all the way through? Also - Why did you stop showing the accident stats in your Quarterly Reports? The only reason I can imagine is that accidents are WAY up since the closure. You can't restripe lanes, making them too narrow, then re-route thousands of cars and semi's, and not expect an increase in accidents. Why is no one tracking the personal stress factor? Does it not matter to MODOT?

Having to leave 2 hours earlier & getting home 2-3 hours latter because of the closure is insane. IT SHOULD HAVE NEVER BEEN DONE!!!!!!!!!!!!!!

backup on southbound 170 exiting at Hanley is bad, even hazardous. Need to adjust the light at Hanley to let more traffic exit the highway. Not sure why this has recently gotten so bad unless they changed some signals as it hasn't been that bad since the first week of the 40 flip. It shouldn't take 20 minutes to get from Forest Park exit to Hanley. I have tried leaving work earlier (as much as an hour), same problem.

ACCESS TO HWY 40 WEST OF I-170 IS IMPOSSIBLE BECAUSE MCKNIGHT AND BRENTWOOD TRAFFIC TO THE HIGHWAY IS BACKED UP AT RUSH. THE TRAFFIC LIGHTS DO NOT SEEM CAPABLE OF FLOWING TRAFFIC EFFICIENTLY. THEREFORE, I STAY MORE ON SIDE ROADS AS IF THE HIGHWAY IS STILL UNDER CONSTRUCTION.

I travel to and from work from the Metro East (O'Fallon, Illinois) to Chesterfield, Missouri and travel either 255/270 or 44 which adds around 10 extra miles to my commute and an extra 20-30 minutes commute time and more money in gas.

I must now take manchester to hanley to 170

The closure of the road negatively impacted the amount of business done at my job, and I had been laid off because of it.

This project has been a real pain. MODot is the most incompet branch of this state government.

I don't need the freeway to commute to work, thankfully.

I can get onto 170 Northbound much more quickly! Takes me a little longer to get to the west end areas

The closure has only prevented me from visiting a restaurants during my lunch breaks that are slightly far from downtown.

I have relegated to the expressway and the intersection at Skinker needs some tweeking and soooooon

Honestly, I expected this half to be worse. It isn't the most convenient process in the world, but my drive to work isn't as bad as I thought. Fortunately, I'm not required to be in the office at any certain time. Also, the "back way" (beside the Best Buy in Richmond Heights) around Hanley/Eager is nice. That said, I am looking forward to the new Big Bend exits opening up...hopefully they make the same good time as they did on the western half.

I live on the eastern end of the closure but instead of going to the Brentwood/Hanley area to shop/eat, I go to Illinois.

The major problem I've encountered is the lack of left turn lights along Dale Avenue. It would be helpful, especially at rush hour, to have left turn arrows at Hanley and at McCausland. It is nearly impossible to make a left onto Hanley from westbound Dale Avenue.

I'm retired and do not have a regular commute. I take pains to do my errands between 10 AM and 4 pm when possible. In ant case , I try very hard to avoid being out at rush hour. I used to use Forest park park way a lot; now I use it as little as possible, using a Delmar or Vernon route east to Skinker, and Waterman or Lindell to get to my final destination or crossing point to St. Louis city destinations. This isn't good at rush hours but works well for my chosen travel times. I always plan my errand schedule to achieve several errands at once, for example, gas, post office and grocery store, or a trip to 3 or 4 destinations along Brentwood, like PetsMart, Trader Joe's and or/Whole Foods, Target and/or hardware needs at any of the three stores in that area. This saves time, trouble and gas. I rarely drive more than 2 times a week unless I have volunteer work to do, which I can't usually schedule myself, and sometimes I do errands in conjunction with that to save time and travel.

Satisfaction Comments

The following comments were left in response by those who wanted to leave additional input after the satisfaction questions (for example, *Please indicate your level of satisfaction with how well the public has been kept informed about the New I-64 Project*). The comments are presented as they were received.

I live slightly west of Manchester and McKnight. The traffic has been horrendous on Manchester Rd, especially since I have to make a left out of my street. I know lots of people are using Manchester as an alternative (I know I am). I am looking forward to the traffic lightening up on Manchester now. My family lives in St. Peters so we already (today) have taken advantage of the opening. Great job. It's amazing how quickly it was done. I've enjoyed tracking the progress on your website. It's been educational for my kids too. None of us knew just how much went into demo and construction.

Population of the City is more dense than in a 5-mile stretch of highway in the county -- you didn't take that into consideration.

Parking on Lindell along Forest Park should be prohibited 24/7 during construction.

Over the weekend I was traveling west on Oakland and tried to turn left (south) onto Hampton to get to Manchester; however, there was a "No Left Turn" sign posted at Hampton and Oakland. So I proceeded west and -- like everyone else -- hit the barricades at the Oakland Ave. overpass and had to u-turn. I am angry that it was stated in the Post that drivers "ignored" the "Road Closed Ahead" signs -- there weren't any! If I was able to see a small "No Left Turn" sign, I would have seen a Road Closed Ahead sign. Furthermore, how did dozens if not hundreds of other drivers also "miss" this sign. I'm not nearly as angry about that overpass being closed early as I am about you claiming there were signs when there weren't any.

US61 signage was lacking. Effects on bicycle commuting appear to have been ignored for a year. I feel I was not told the truth about: - When work in my back yard would happen and be done. - What was sprayed on the foliage in my yard and what I could do about it.

I am glad the decision to complete the work in 2 yrs vs 6 yrs was made. Now, half of the highway is completed. Also, the coverage on local news has been good in keeping me informed of the progress.

The local media and Dan Galvin have been doing a superb job keeping us informed,

While the new section just opened, we could tell travel East and West via Olive has lightened substantially.

I wish all government-sponsored activities ran this well. Excellent communication and media relations.

While the job, as designed, has been managed well, I question the value of doing all this work to end up with a product no better than what was there before. It's shocking to see new bridges going in no wider than the old bridges, and the elimination of secondary access points (Galleria Parkway, Laclede Station Rd, etc.), that previously allowed us to avoid the horribly congested ones. Also, it's hard to understand why this job takes so long and why there aren't more crews and why they aren't working 24x7.

I think it overall was handled well until now, but I am concerned with the north / south routes coming up.

It's unreasonable to have Oakland Avenue closed to through traffic when there are so few alternatives for city dwellers to travel west into Clayton. It's a perfectly good stretch of road that is not being utilized.

I respond satisfied because obviously the 6-8 years would not have been a piece of cake but the east side is going to be ugly--you have Wash U right at a busy corner of an alternate and you have Forest Park sitting right where 10K people attend the Muny....you had none of those things on the west side.....

I hate that this starts in the dead of winter and bad streets its dangerous

Outstanding management, planning, and implementation. I can only feel disappointed that the additional sound walls were not already in place in this time since it is apparent that beyond the roadway, the project actually was NOT completed earlier than normal in whole.

The western closure was not as impacting as we all feared. I would give you an A+ on this. The eastern closure has crippled the center of the city. I would give you a F--- on this. All efforts must be given to getting 40 in front of the zoo open so that traffic on clayton can flow. This is a high high high priority section of the project.

A bunch of money was spent on the project completion count-down calendars for the highways - they have been turned on for a few days, but not regularly. Why was so much money wasted to not be used?

I take 70 in and the directional lanes need to change to Eastbound in the morning and west in the evening.

When I was a kid, I-294 around Chicago was completed one mile per week. They had to build bridges, move homes and started from scratch. They had almost unlimited labor resources and was quite a project. One Monday they were behind my house moving our neighbor's homes out of the way and grading the roadbed, by Friday they were pouring concrete, and on Sunday the road was stripped, signed, and it was done. Amazing. I assume blending the old and new takes longer.

Closure of Eastern half has impacted me so badly that the quality of my life has been doing down.

The ramps connecting west bound 64 and 170 have work zone speed limit signs of 40 mph but when I travel these I am the only one going this speed and have noticed other drivers upset that I am going this slow. Is this the correct speed or are the other drivers just not paying attention to the posted limits?

The Oakland closure and Dale Ave is a perfect example of the poor communication. I was traveling east on Eager on Jan 2nd and saw the signs for Dale Ave. My mom even pointed it out to me as I was heading to Dale Ave. Well, I ignored the signs because I knew that I could turn at Dale off Hanley...WRONG. I heard about this for the first time today...kinda late. Also, I think the alternative routes should've been better explored. Example, why is Jefferson Ave still not open southbound??? Also, closing Hanley and shifting the traffic to Brentwood was simply a ridiculous thought. Why didn't someone test these routes out on normal people before they just knock down overpasses and expect us to figure a way around it.

I think the western half of I-64 is beautiful!!! I hope all of the new plantings survive and look great for years to come. Thanks for making I-64 (west) beautiful!!!

Sometimes the signs don't make sense or they don't warn you until you're right there. I don't have any specifics examples, but I do remember a couple of times thinking I wish I knew this about 1 mile ago. I do really enjoy the new Western side of the highway.

The opening party was nice to go to, but there should have been people there with info about the carriage rides. We were there looking all over for where they were going to start, waited a very long time, along with many others, asked several people, who ended up giving conflicting info...we finally gave up just in time to see the 2 carriages arrive. 2 carriages for that amount of people? Not nearly enough. And they were small carriages at that. Other than that, we did enjoy being able to walk on the highway before it opened and look forward to doing so on the east part of the highway. Hopefully any activities (other than the bike rides, which were fun to watch) will be better planned and executed.

You have done a GREAT job communicating and getting everything done. My only complaint is the concrete lifeless jungle you have created on hwy 40. I understand home owners may have wanted them (but why did they live there to start with and I question the tactics used to get an agreement), but you have taken away all the charm and life out of the highway. You have even blocked business that I am sure relied on drive-by traffic. PLEASE reconsider creating the concrete vacuum on the other half. It's not that loud, I use to live by it. If it is too loud, move. PLEASE keep the charm and warmth that is St. Louis and don't block it out.

continued problems of grid lock at skinker and forest park continue. Police need to patrol southbound skinker for cars who block private streets and do not keep intersections open. signs are not sufficient and grid locked cars disobey. tickets by the gross are in order till behaviors improve.

While the traffic impacts aren't as bad as I thought they would be, I do not believe that doing this project with the highway open would have taken 6 to 8 years.

This project could have been done one side at a time as many other interstate projects are done without too much of an impact to the timeline.

There are enough people and construction workers unemployed that you could have doubled up on the crews and completed the project in less than two years with the total closure concept and maybe even saved some money as completion of the project sooner would have less of an inflation factor. Marsha marshab80@gmail.com

Obviously the Parkway is a mess. I do not understand why Big Band was not rebuilt at the same or almost the same time as Boland Place and Highland Terrace. That way it would be done now and the Hanley overflow would have a reasonable alternative.

The overhead signs, telling us how long the travel time is to a certain highway, are ALWAYS WRONG during peak times. The changeable speed limit signs on 270 are a joke. If I could possibly do 40 mph at 5pm on 270 southbound, I would take back every nasty thing I have ever said about MODOT. By the way, how much did those "Countdown To Completion" signs cost? Those have worked about 10 days over the past 13 months. Another huge waste by MODOT!

The east closure I don't take to get to work - but I travel that exact stretch for church and MANY other activities. Lots of friends live over there. It is INCREDIBLY inconvenient as all the alt routes are heavily trafficked and MUCH longer. Wish a better plan could have been made for the east close down. The west closure was much easier to find an alt route. But having the whole east stretch closed is killing me!

MODOT deserves credit for how relatively smoothly things have gone so far.

Who ever arranged it had better have been fired for this stupid idea.

you could have done this without shutting down the highway and in far less than 6 years. you can say six years but that is the party line bull crap to get what you wanted. I can NOT believe it would have taken to 2014 to get the job done.

While I realize it would have taken more planning and cost a few more dollars, I do not believe it was as much as you are saying. Also, the region has suffered because of the shutdown. I go to St Louis for work because I have to. I did not purchase my seats for the Cardinals, Rams or the Symphony this year or last. I will consider it again in 2010 after the highway re-opens.

Mo Dot should have completely closed the highway for a yr

Gee, the world didn't come to an end, did it???

I can't wait for this project to be finished. It is sapping our city of people, economic activity and vibrancy. I hope that measures are being tackled to bring people back into the city once this is all over.

I am really tired of hearing from the people who nitpick and whine about everything! Some of the questions asked in the newspaper about the project are so picky!

Very smart to close only for 2 years. The impact has not been as severe as many predicted, and the benefit will be great.

you have caused massive traffic jams on streets and roads not equipped to handle the volume of traffic. this traffic has caused destruction of road surfaces with no thought as to upkeep and repair of the destroyed surfaces. the waste of time daily in my commutes during the first section closure caused me to alter my life significantly for one year when the project could have been done nearly as fast by performing the work sequentially on westbound lanes and then east bound lanes with total closure for the times needed to destroy and rebuild bridges. i hope that the surface is better built than the deteriorating surface of I-170 which has large holes in it already.

MODOT should insist that StL news agencies refer to the interstate by its true name, I-64. 40 is not the name of the interstate, so it's not I-64/40. If anything, it should be I-64/US 40. But no one in St Louis refers to it by anything other than 40 or Highway 40. The superseding name is Interstate 64. Signs, news updates, and other information should refer to it as such.

Just never heard of an interstate/freeway being closed in the middle of a major city; traffic in a city is to be expected...I'm just sayin.

I live right by the intersection of Forest Park Pkwy and Skinker (I live on Waterman). Traffic in the morning, since the Eastern portion of 64 closed, has been a NIGHTMARE! I never take Forest Park Pkwy North, to get to work anymore, and I certainly do not take it coming home. The changing of the stoplight timers has made the situation worse. If you don't want people to take Forest Park Pkwy, the timers never should have been changed--this would have made alot more people take alternative routes instead of majorly clogging Skinker. Again, the second half has become a nightmare. I want to commit an act of road rage every single day. Oh, I forgot to mention, since the 2nd half of the closure, and everyone and their brother taking FPP, I have never heard so much horn honking in my life. Even after I finally make it home, it's honk, honk, honk for at least an hour.

I am strongly dissatisfied that Hanley, Hampton and Big bend overpasses will be closed at the same time. Is this a conspiracy to keep the north and south side residents of Clayton road from getting anywhere. On any given day, Brentwood is a mess and then next nearest route would be kingshighway!!!

1) Screwed up on Lindberg to west bound I64. Right lane goes straight, left lane ends. You have it confusingly marked with the right lane ending and the left lane going straight. Really mixed up here? Accidents waiting to happen. (It needs to be consistent and it's done both ways all over town) 2) East bound I 64 @ I 270 ONLY TWO LANES GOING EAST???? That's nuts!!!! What a mess you have created. You have eliminated a lane and caused a backup & accident zone for out of towners. I thought we were trying to make things better? 2 Lanes on east bound I 64 is going to be a mess for years to come. 3) Spoede both exits suck. East bound exit. Mound of dirt blocks view as you approach intersection at Spoede & Outer Road, Fence totally blocks view of oncoming south bound Spoede traffic, another accident waiting to happen. 4) West bound Spoede entering I 64 has a sharp turn and no barrier. Cars will end up down there and the entrance ramp is too short. I thought you were going to improve it? It's shorter?

I don't understand why the streets in the "Dogtown" were blocked. It is difficult to drive the routes in the area.

AS I have said before, more attention could be paid to routes north and south across the closure. I live north of it near Delmar in U. City and do the bulk of my shopping south of it, mostly in Maplewood and Brentwood. So far, if I follow the precautions and routes described above, I do pretty well, but I really dread the Big Bend closure, which will considerably lengthen my route for my most frequent errands, especially if Hanley Road is still closed.

Alternative Route Comments

The following comments were left in response by those who wanted to leave additional input after the questions about alternative routes. The comments are presented as they were received.

The light at McKnight and Litzsinger was my most favorite improvement. It had been needed for so long and I HOPE it never goes away!

The light at Warson and Ladue serves to slow down traffic quite effectively. You did not ask about the added center turn lane on Clayton. It obliterated the bike lanes so well that I feel my life is in jeopardy riding my bike on clayton when it used to be a most preferred bike route.

I am VERY unhappy, and feel we were deceived that the sound wall would be complete before the re-opening of the western half. As a taxpayer, why does the contractor deserve a bonus payment when procurement of critical materials was not completed on time? I feel the overall project was successful, but I feel this aspect was not at all addressed.

Traffic signals on Union Blvd northbound to I-70, I leave at non peak hour before 6 am, and usually hit 6-7 red lights in less than 3 mile stretch. I find the same with Kingshighway and Forest Park Pkwy.

The S I 270 to W I 64 dedicated entry lane was excellent and I am dissatisfied that it is no longer used. It relieved a cumbersome bottleneck.

It seems that there is no sense of urgency in clearing accidents. Out east, they just push vehicles out of the way and out of the drivers view as quick as possible and then deal with the collision.

the traffice signs on 44 do not ever change - if there is an accident or slow down it rarely tells you about it

Remove or shorten (on the Forest Park Parkway) all of the stoplights on Forest Park Parkway from Euclid to Big Bend - these traffic lights are causing terrible delays on FPP.

I-70 and I-270 the extra lane helped, but on I-44 it made the road to narrow

The extra lanes on the highways probably help but are extremely dangerous!!!! They must be removed immediately upon completion!

The Temporary Lanes are very difficult to drive on. You basically drive on the rough pavement that used to be the shoulder.

During the second half of the project, the congestion on Forest Park Pkwy. has been awful. Much more traffic could be moved through quickly if the traffic lights were timed better. This could be the best alternate route in place of Hwy. 40/64 while it's closed, but instead it has been a parking lot.

Pavement on west bound FP Pkwy between Grand and Kingshighway is pretty rough along the right shoulder.

why isn't there temporary lane addition in shoulder area on I-270 east of I-170? Illinois commuters have been completely ignored by MODOT - to suggest that I-70 is a viable alternative to I-64 as a means to get to Clayton is completely ridiculous.

Traffic light timing changes to support the western half of the construction, now need to be changed back!

From what i see on the morning news, 270 IS HORRIBLE!

I don't have an opinion on this, but I do for the commuting. You have to keep in mind working parents. Believe me, I would LOVE to leave for work earlier or carpool, however, I have two school age children. I have to have a car for emergencies. The kids schedule stayed the same, so does mine. However, now I have to work later to make up for my new start time. I am lucky because my husband picks them up. I can't imagine if I was a single parent trying to accomodate this. Plus, I checked out the bus routes. It takes way too long to get around.

variable speed signs were often not accurate. 511 didn't provide info on alternates to Clayton Road which was my main alternate while the west part was closed.

The addition of an extra exit lane on southbound 270 to 44east has made an extremely positive impact on the traffic flow at that internchange. I hope this will be considered a permanant change after 164 opens.

Trucks still speed on interstates but have narrower lanes. They can be pretty threatening.

metro link needs to handout free "try me"passes with a ridefinder link to single passenger cars lined up at lights at big bend, skinker and debalivere to induce using the metrolink next to them and reduce forest park traffic. I'm sure Wash U students would be ready activist volunteers. Be much more proactive to change st louis attitudes to use light rail and bus. Get more employers to incent the cost of commuting with green methods, carpools and light rail, especially those with parking problems.

The temporary lane additions in I44 and I70 should remain as permanent at the conclusion of the project. Marsha marshab80@gmail.com

Restriping was very dangerous - no shoulders!! Trucks and busses are not staying in their lanes, and wander into mine way too often. The Traffic Response guys seem to be doing a good job, but the incidents are reported on the radio/overhead signs too late to pick an alternate route. And - usually the info is wrong. Wrong lane reported closed, wrong direction on the highway, etc.

I-44 LINE PATCH PULLS MY CAR ALL OVER THE PLACE. IT'S HORRIBLE. NOW I STAY OFF 44 ALSO.

The temporary lanes on 270 and 44 shouls me made permanent after the I64 project is done. They ae more important to traffic flow rather than ahving the empty shoulders.

Since I didn't frequently travel my alternate route before construction, I don't know if impacts were better or worse.

i do not believe the statements that 6-8 years would have been required to accomplish the task if a different method of construction had been chosen. i think that extra time would have been measured in months.

The message boards are awesome through the metro :-) Keep those working...its awesome! The St Louis City Streets Director is completely ineffective...he is totally out of his league.

The signal timing on Forest Park Parkway is a joke. If you wanted people to stay off of it, you should have never timed the lights shorter to accomodate the idiots who continue to use it. This has caused severe backups on intersecting streets (aka Skinker). Common sense was definitely not utilized in this decision

the extra lane on 44 makes it bumpy and uneven, i think its dangerous

I don't reccomend travel on those hwys as the lanes are too narrow and dangerous. The improvements on the wester half do not justify the cost and problems caused. It won't handle more traffic if it narrows down to 2 lanes at any point. We should have left it alone or built a better and larger highway. Improvements that move traffic are minimal. Hay it looks great !

Westbound Dale Avenue at Hanley is a NIGHTMARE at rush hour.

I've not used or experienced the 3rd and 4th services. I have found your on-line service very useful. The signal timing efforts have helped with traffic involving the Parkway, but I'm VERY GLAD that I retired a couple years before this work took place (I worked at the Washington U. Medical School, and I'm pretty sure my commute time would have doubled or tripled. The city of St. Louis has planned especially badly for this trip, with the work on the Jefferson and Delmar Station bridges being done at the same time. It's especially interesting that the work on both of these bridges has taken them at least twice as long as it has taken the state to replace any bridge. I've felt that their notification about these projects to be pretty abject as well. The way I found out that the Jefferson bridge was down almost three years ago has when I started to turn off Chouteau coming west o use it; there wasn't even a warning sign on Chouteau as I recall, just a sudden absence of any street where Jefferson used to be. I assume no one landed in the void below, thought at night it would have been a real hazard.

How to Contact Comments

The following comments were left in response by those who wanted to leave additional input about how MoDOT could best provide them with information. The comments are presented as they were received.

I like the MoDot Emails sent out on a weekly basis

I like receiving email updates on the I-64 project.

Local television news and morning radio has helped us the most.

I tried to map my ride and it isnt working for me.I need to find sites that truly are working with the closings.

The regular emails from MoDOT have been by far the most helpful for me and my family.

our office on Big Bend had a representative on MoDot come to our office with information, hand outs, answered all our questions!

email, email, email road closures BEFORE they are closed.

it doesn't really matter how you notify the public about changes they don't notice them or read them.

It's a shame the countdown signs aren't always "on" and functioning.

I like the flyers that I have seen at my gas station at dale and hanley that have been published and distributed by MoDOT

More display boards on alternate routes

I don't have a TV, get a newspaper and rarely listen to the radio. So I would go look for info online as I heard about it. But it would have been wonderful if perhaps you all would have partnered up with the various business/companies/organizations around the metroplex to equip them with info and alt route suggestions to communicate to their employees (or to at least give them the info/option to sign up for any newsletters/emails that you all might have provided). With the west closure, I did move from the city to west county since 64/40 was what I took every day to work. The people running my company didn't know any more about the project than I did.

I get frequent update information from the Richmond Heights e-mail alerts

See previous comment about calling I-64 only I-64 rather than mentioning Highway 40

The message boards are awesome...they're great :-)

Placed on the road to receive the work one week prior to construction.

I no longer take the daily paper, so that is less useful to me. TV news and on-line notices are most effective for me, though I think that radio is probably useful for many people, who listen while they drive, and the signage about closure on the feeder routes are also very good, because they allow drivers to plan alternate routes on the go, and avoid the centers of real congestion. I'd still like to see more information about north-south routes about the closure, and I think that on future projects the highway department would do well to remember that the St. Louis region goes a very long way north and south, and many people commute or have necessary contacts which require them to use mid-area east west roads on a regular, frequently daily, basis. They could also try to see that St. Louis and other towns near such projects work harder at having their road projects near such construction in better order, that is, finished, before a major route is taken down. The Delmar Project is a prime example of such a misjudgment, even at the times of day I travel, I've seen two block long lines of traffic creeping across the bridge in the single lane traffic. I can only shudder to think what it must be like at rush hour.

Alternative Website Comments

The following comments were left in response by those who responded to *If you heard about the closure through one or more sites not listed above, please tell us which site(s)*. The comments are presented as they were received.

TheNewI64.org

I will add these sites to my favorites and check them out.

KWMU

stltoday.com

i watch info on thenewi64 and am active follower of the changes, i'm not at all standard commuter.

msn.com

Fox News FNN.com, Google.com, Googlemaps.com

mapquest.com and maps.google.com

tv 11

Richmond Heights citizen e-mails

I-64 Project Website Comments

The following comments were left in response by those who responded to *What additional information would you like to see on the I-64 Project website?*. The comments are presented as they were received.

Keep us informed on what "leftover" work you are doing on the western half of the closure (I noticed today that soundwalls are not done yet)

When closed areas (eg crossroads, bridges) will reopen.

I love the maps. Very interesting.

Clear maps showing alternative routes across the closure.

The New I-64 Economic and Regional Mobility Study

Quarterly Report #6

March 2009- June 2009

HDR

Before the Closure

Please indicate how much time it takes you to make certain trips now compared to how long it took you before the closure.

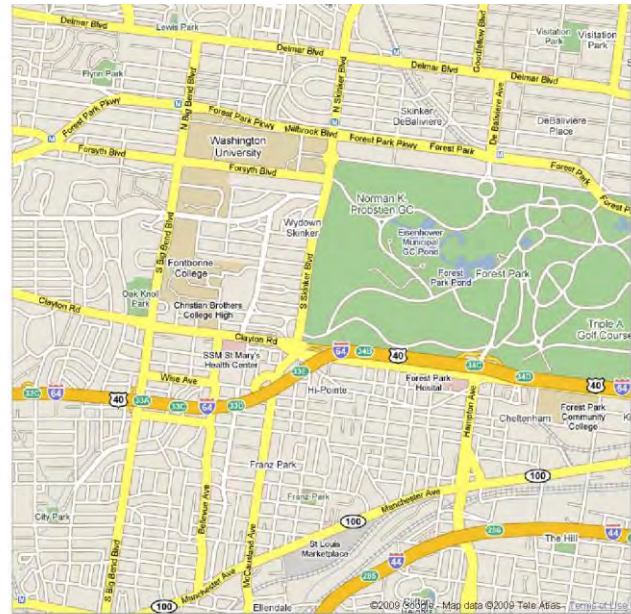
	Less than half of 15 minutes	Between 1/2 and 1 hour	1 to 5 minutes	5 to 15 minutes	15 to 30 minutes	More than 30 minutes
Traveling to and from work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Traveling to and from school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Traveling to and from shopping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Traveling to and from recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Traveling to and from other errands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



1. Executive Summary

On December 14, 2008, the eastern closure began with the closure of I-64 between I-170 and Kingshighway Boulevard. On December 15, 2008, the western closure of the New I-64 was opened to traffic. Partners again implemented their regional command center operations to ensure that any traffic flow conditions were addressed and responded to as the public adjusted to the change in closure along I-64.

This quarterly report assesses the period March 2009 through June 2009 that includes the 15th, 16th, 17th and 18th months of the I-64 closure, evaluating the three key areas of **Communications** (MoDOT's provision of information to the public, and the public's response to the project), **Mobility** (the effects of the closure on travel behavior, choices, and traffic flow), and **Economics** (the effects of the closure on businesses within the corridor as well as the economic health of the region). With the eastern closure now in place; the study will begin to focus attention on potential differences in the eastern closure. In the 2nd Quarter of 2009, the research team found the following information:



Communications (pp. 2-4)

Surveys indicate that the overall satisfaction level remains high

The Eastern Closure appears to be having more of an impact on travel behavior based on responses from “where I shop”, “how often I travel to certain areas” and “how well I managing to move around St. Louis

TV News, Internet, Radio News and Roadway Signs still are the leading way to get information on the construction project

Information from Motorist Assist and I-64 Traffic Response on the two survey questions still remains higher than online surveys when asked the same question

Mobility (pp. 4-5)

Traffic volumes continue to be higher on the designated interstate routes and adjacent arterials. Daily volumes are up 27 percent on Interstate 44 and up 50% during peak periods along several arterials.

Average speeds are down slightly along certain corridors. The range varies from being plus (up) 22% on I-44 eastbound in pm peak period to being negative (down) 14% on I-70 westbound in the pm peak period.

Travel times are up slightly on certain interstate and adjacent arterials and correspond similar to measurements denoted in average speeds above since, these measurements are based on the average speed

Economics (pp. 5-9)

Both corridor and non-corridor wages where high in the 4th Quarter of 2008

Unemployment in the St. Louis area is tracking very similar to national trends in 2008 and the first several months of 2009.

The change in sales from the 4th quarter to the 1st quarter of this year was very evident again similar to the previous three years. Seasonal sales in the 4th quarter are normally the highest period. The 1st quarter of 2009 was \$349 million less than 1st quarter of 2008

The taxable sales during 1st quarter of 2009, when indexed to the 1st quarter of 2005 fell below 1.0 for corridor, non-corridor and St. Louis County; only St. Louis City had a index higher than 1.0

2. Communications

In this quarter, we obtained respondent input via a new online survey and mail-in surveys from recipients of Motorist Assistance and I-64 Traffic Response services. We will continue to assess information received during the eastern closure and compare it to the western closure information received in 2008. This comparison will show any consistency or inconsistency in the two data sets. **Both survey methods indicate that the overall satisfaction level remains high even though the Eastern Closure appears to be having more of an impact on behavior (those indicators shown in darker blue-green in table below) than the Western Closure did.**

Online Survey

Based on the online data, the Eastern Closure is having a greater impact on respondent behavior than that of the Western Closure. “Satisfaction with how well managing to move around the St. Louis area with the closure” is noticeably different. Despite this reported increased impact, overall satisfaction with MoDOT remains very high – almost identical to the results received during the Western Closure. The Table below shows all responses received from online surveys for both the 2008 Western Closure and 2009 Eastern Closure for side-by-side comparison.

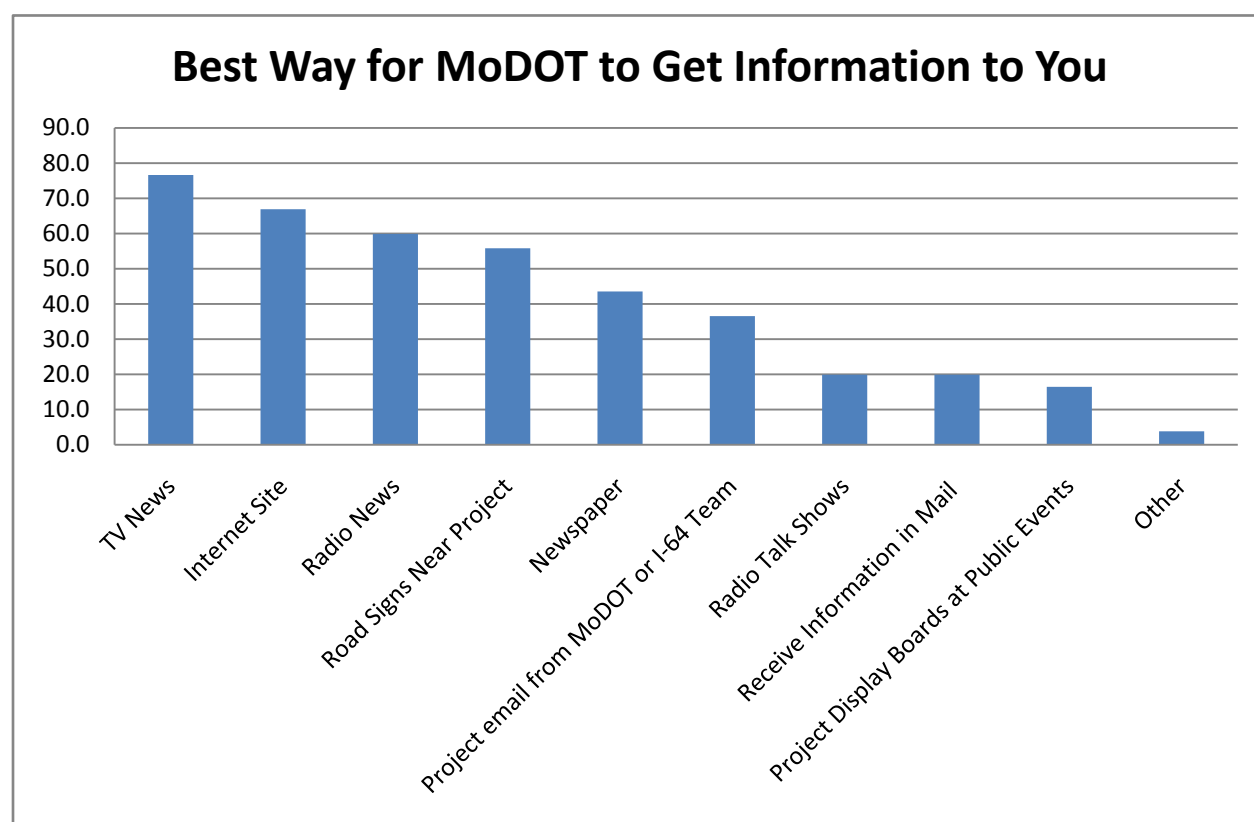
Key Public Indicators - Online Comparison of Both Closures	Western Closure	Eastern Closure	Total
Overall level of satisfaction with how the I-64 closure has been handled	76.7%	76.9%	76.7%
Satisfaction with how well the public kept informed about the new I-64 project	88.7%	89.6%	88.8%
Satisfaction with how well managing to move around the St. Louis area w/ the closure	69.7%	58.6%	68.0%
Satisfaction with timeliness of information being made available	87.5%	89.5%	87.8%
Agreement with “the closure has changed where I shop”	41.5%	46.3%	42.2%
Agreement with “the closure has changed how often I travel to certain areas”	73.3%	78.1%	74.0%
Satisfaction with decision to complete the work by closing I-64 for 2 years instead of 6-8 years w/ lane closures	76.5%	81.1%	77.2%
<i>Survey responses</i>	<i>1,362</i>	<i>245</i>	<i>1606</i>

Respondents are less satisfied with their ability to move around the St. Louis area. It was noticed they were more likely to state that the Eastern Closure has changed where they shop and how often they travel to certain areas. These responses could be the results of several different factors like the adjacent alternative transportation network, adjacent land use (commercial, business complex, residential, recreation, healthcare, etc.), lower response rate, second year of construction, etc. The project team will continue to monitor these changes in upcoming reports.

The best ways to reach online respondents is unchanged from the previous year as demonstrated in the following table:

Best Way for MoDOT to Get Information to You	Western Closure	Eastern Closure	Total
TV News	62.4%	77.0%	64.8%
Internet Site	60.2%	68.8%	61.5%
Radio News	51.2%	54.3%	51.7%
Road Signs	43.2%	53.8%	44.8%
Newspaper	43.0%	40.9%	42.7%
Project email from MoDOT or I-64 Team	24.2%	38.0%	26.3%
Radio Talk Shows	19.8%	17.3%	19.4%
Receive Information in Mail	13.1%	19.2%	14.0%
Project Display Boards at Public Events	10.8%	14.9%	11.4%
Other	2.6%	3.4%	2.7%

The following chart presents the total column to graphically indicate the best way to reach these respondents based on the on-line survey tool.



Motorist Assist

Two key questions were asked in mail-in surveys given out by MoDOT's Motorist Assist program as another way of obtaining information. The change measured since the Eastern Closure has been minor, but in accordance with that of the other methods. People are finding it slightly more difficult to move around, but are still quite satisfied, especially with the decision to close I-64 for two years instead of six to eight years with lane closures. The following table shows the comparison made between the Western and Eastern closures:

Key Public Indicators - Motorist Assist Comparison of Both Closures	Western Closure	Eastern Closure	Total
Satisfaction with how well managing to move around the St. Louis area w/ the closure	90.0%	89.4%	89.8%
Satisfaction with decision to complete the work by closing I-64 for 2 years instead of 6-8 years w/ lane closures	93.8%	95.7%	94.4%
<i>Survey responses</i>	<i>3,837</i>	<i>1701</i>	<i>5538</i>

3. Mobility

In this quarter, we obtained traffic data for both freeway and arterials. This information shows both baseline and quarterly traffic data for easy comparison of any changes in traffic conditions. Traffic data collected includes traffic volumes, speeds and travel times along various routes near the I-64 construction project.

This quarterly report will implement a new display method that will allow for larger displays of tables and graphs. Sections by traffic volumes, average speed and travel times have been developed. The tables and graphs will be introduced with a short summary of what has been observed, and then the reader can select the link to the full page table or graph.

Freeways

We continue to notice increases in daily traffic volumes along I-44, I-70 and I-270 when compared to the baseline traffic volume data. Also, daily traffic volumes on I-64 west of I-270 are almost back to the baseline (pre-construction) level. The four graphs show baseline and April through June, 2009 traffic volumes:

East-West Baseline Traffic Volume – [Graph link](#)

East-West April through June 2009 – [Graph link](#)

North-South Baseline Traffic Volume – [Graph link](#)

North-South April through June 2009 – [Graph link](#)

The following table shows daily traffic volumes, and average speeds and travel times information for the PM Peak periods. These selected sites were selected early in the study to designate some control sites to monitor that could potentially experience changes with the construction along I-64. These freeways were designated and signed as alternate routes for impacted traffic. By consistently monitoring the same sites, we can get a general understanding on how traffic is moving in the region.

Selected Traffic Monitoring Sites – Daily Volumes, Speed and Travel Times – [Table link](#)

Daily Traffic Volume – [Graph link](#)

Average Speed – [Graph link](#)

Travel Times – [Graph link](#)

Arterials

The study team continued to notice a slight increase in travel times along the four corridors being monitored during weekday peak periods. These corridors are major arterials and should provide an indicator of travel along the arterials near the I-64 construction project. The following is a table with travel times along each corridor and then five graphs showing the past several months.

Arterial Corridor Travel Time Information – [Table link](#)

US Route 61 – 67 (Lindbergh) – [Graph link](#)

Route 100 (Manchester) – [Graph link](#)

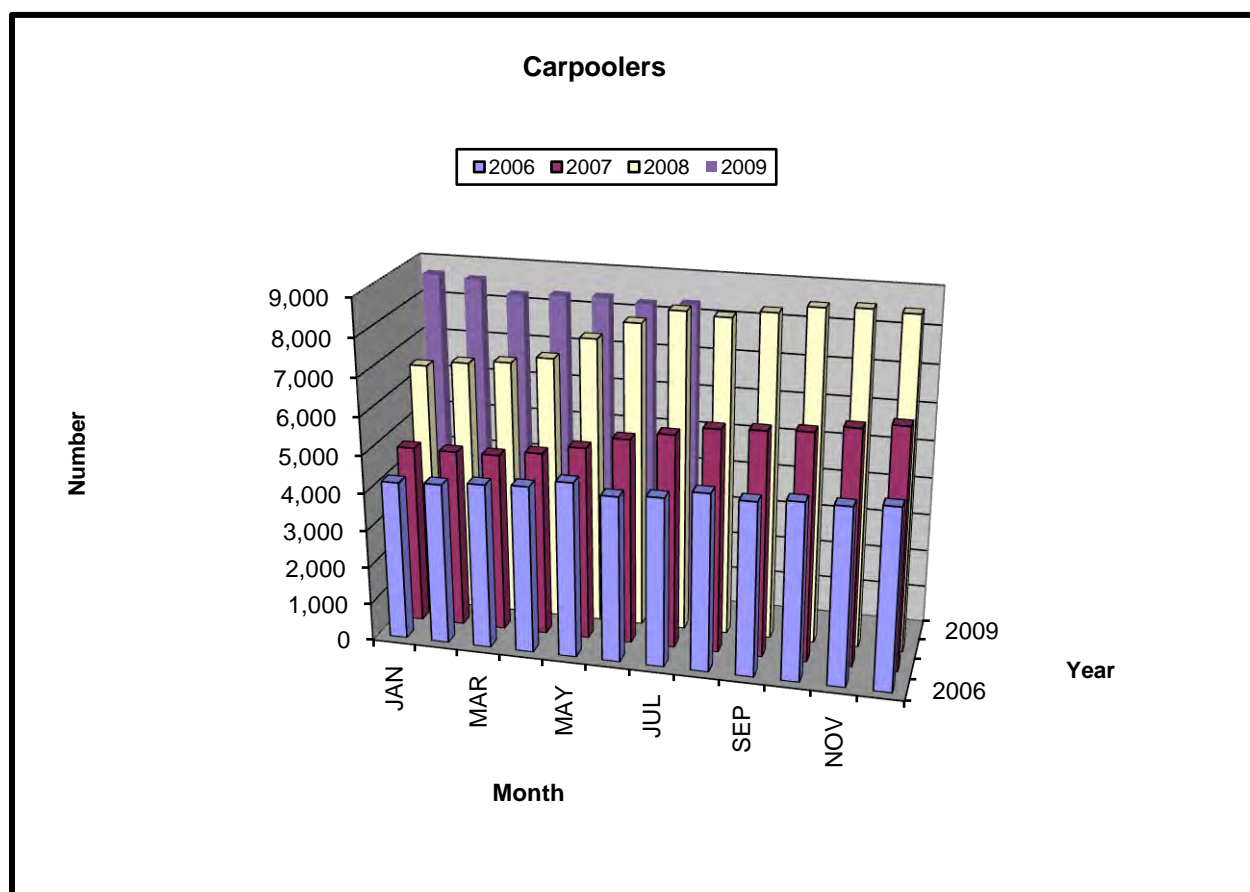
Route 141 – [Graph link](#)

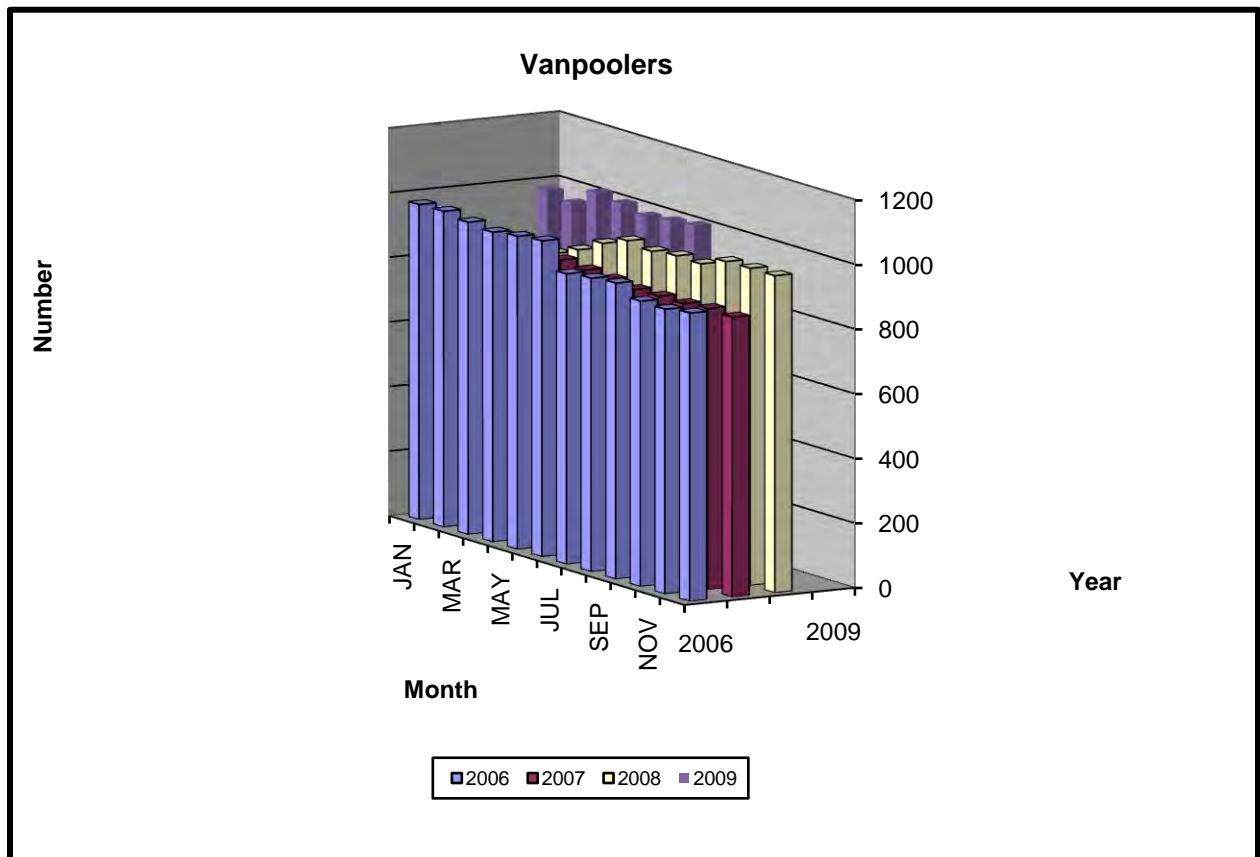
Route D (Page) West Section – [Graph link](#)

Route D (Page) East Section – [Graph link](#)

Rideshare

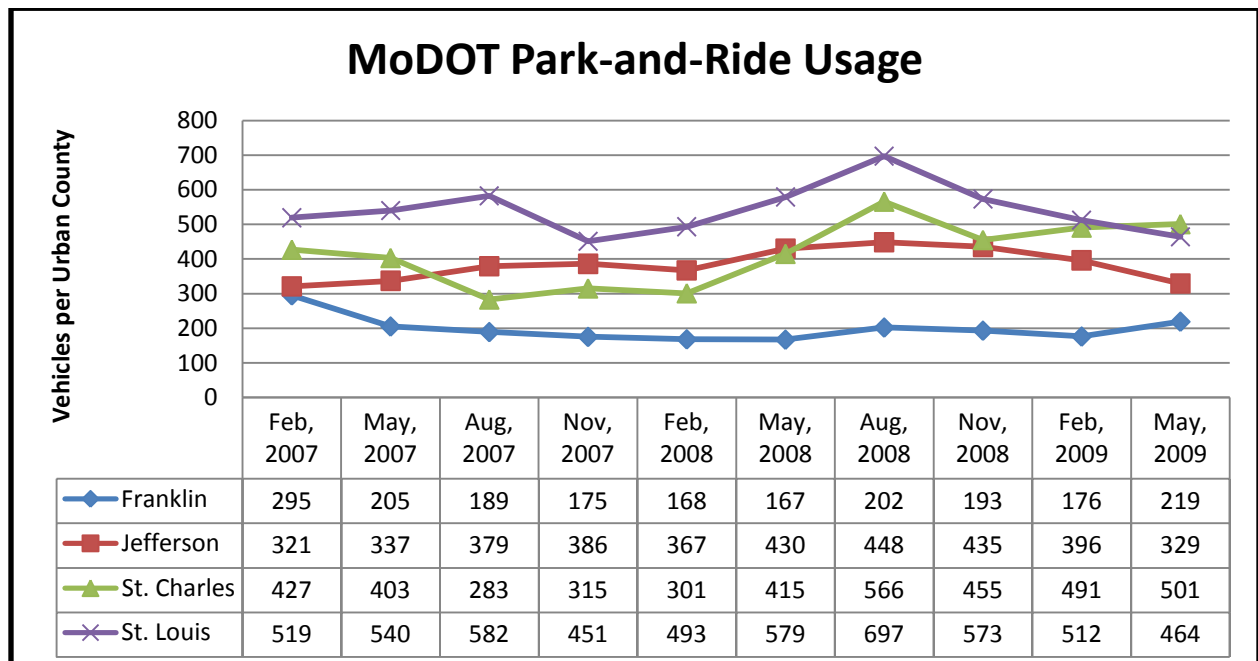
Regional utilization information from Rideshare shows a slight decline in carpooling and a slight increase in vanpooling during this quarter. Carpooling in 2008 and 2009 continues to show a significant increase over base years of 2006 and 2007. Vanpooling has fluctuated over the 3 plus years of evaluation with a low 843 vanpoolers in 2008 and a high of 1018 in 2009. The usage of these regional services can be related to several factors including major roadway construction, economy and higher gas prices. As the study team moves towards the final report, we will use this information along public survey, economic and other mobility information to assess what role it plays in improving regional mobility. The following tables provide a summary of information for carpooling and vanpooling.





Park and Ride

Regional utilization information from MoDOT's 35 Urban Area Park and Ride lots show a peak usage in August of 2008 with declining or a stable usage trend by urban County since this peak. Factors mentioned in the Rideshare section can also apply to the changes in public use of these park and ride facilities. These factors will assess in a similar manner as the final report is developed. The following table tracks usage from the first quarter in 2007 through the present.



4. Economics

Economics Highlights

The primary highlight for this quarter is collection, analysis, and tracking of economic data and financial indicators. To date, MERIC has provided HDR with economic data from the first quarter of 2006 through the fourth quarter of 2008. In addition, taxable sales data has been compiled up to and including the first-quarter of 2009. Given the time lag in available economic data indicators, this quarterly report will only focus on the currently available and collected data.

Economic Analysis Progress

Current activities to date include:

- Collection of the identified published economic, demographic, and fiscal data.
- Receipt of ZIP-code-level data from MERIC for the fourth quarter of 2008. The economic data includes: industry employment, wage, and establishment data tabulations.
- Preliminary analysis of first Quarter 2009 Taxable Sales Data from Missouri Department of Revenue (DOR)

Economic Analysis

The major economic information for the I-64 corridor and non-corridor regions of St. Louis City and County for 2008 is displayed in Table 1. The table depicts a dip in employment between the third and fourth quarter of 2008 for the non-corridor region that surpasses the slight employment gain in the corridor region. While employment displayed some seasonal variation between each quarter of 2008, the number of establishments stayed relatively flat for both regions.

Table 1 St. Louis I-64 Corridor and Non-Corridor Economic Profile

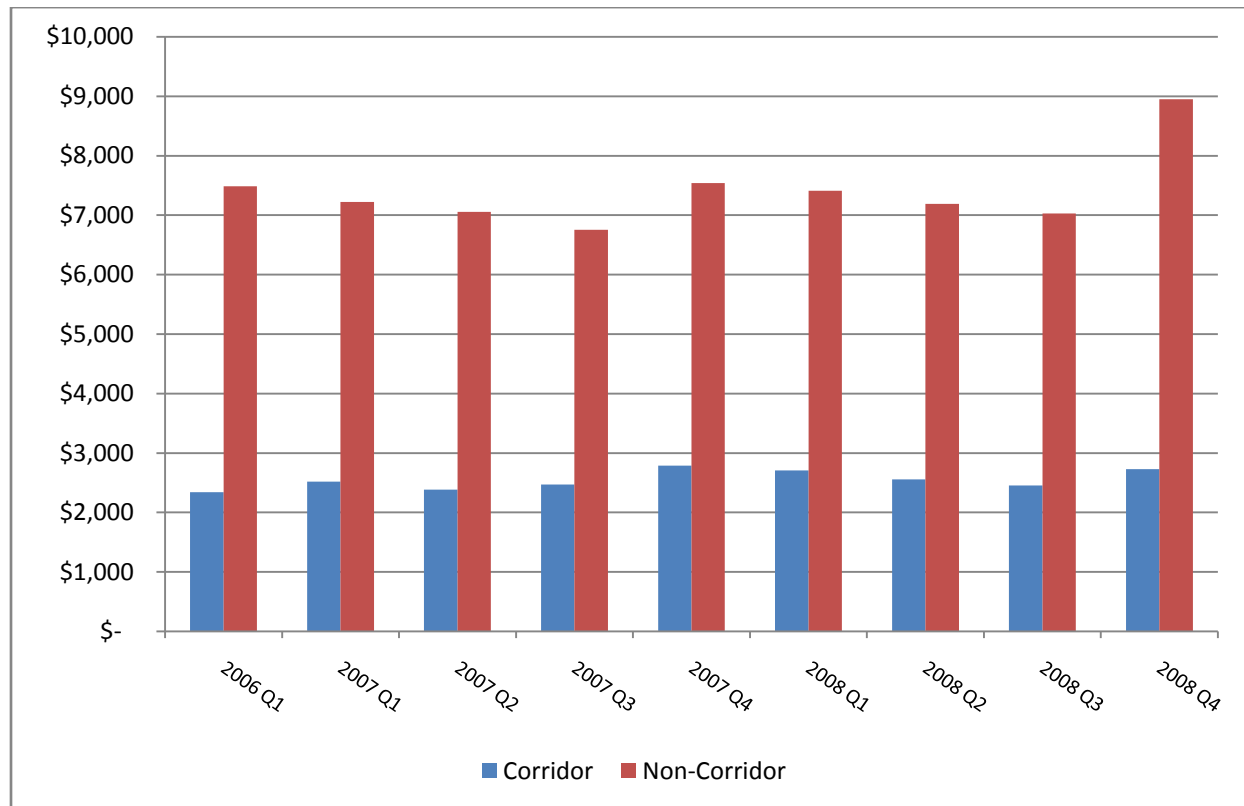
	1st Quarter 2008		2nd Quarter 2008		3rd Quarter 2008		4th Quarter 2008	
	Corridor	Non-Corridor	Corridor	Non-Corridor	Corridor	Non-Corridor	Corridor	Non-Corridor
Jobs	200,772	616,400	201,577	631,271	200,533	627,295	202,055	619,160
Number of Establishments	9,232	31,155	9,197	31,131	9,178	31,256	9,185	31,134
Wages (\$ Millions)	2,705	7,413	2,555	7,193	2,453	7,028	2,727	8,950

Source: MERIC and Missouri Department of Revenue

The corridor region generates upwards of 23% of the total wages of the entire region, totaling \$2.7 billion in the fourth quarter of 2008. The much larger non-corridor region generated \$8.9 billion in wages. Seasonal trends are evident in the wage data for the years 2007 and 2008, as the wages declined from the first quarter through the third quarter of the year and then recovered in the fourth quarter. This substantial increase in fourth quarter 2008 wages is attributable to additional compensation (year-end bonuses, profit-sharing and firm buyout payments) that represents a unique one-time payment and account for the large wage variation from the previous quarter. Even with the exclusion of these additional compensation payments, the non-corridor

would have still demonstrated positive growth from third quarter 2008, albeit at a much smaller rate.

Figure 1 **Total Quarterly Wages by Region in Millions of \$¹**



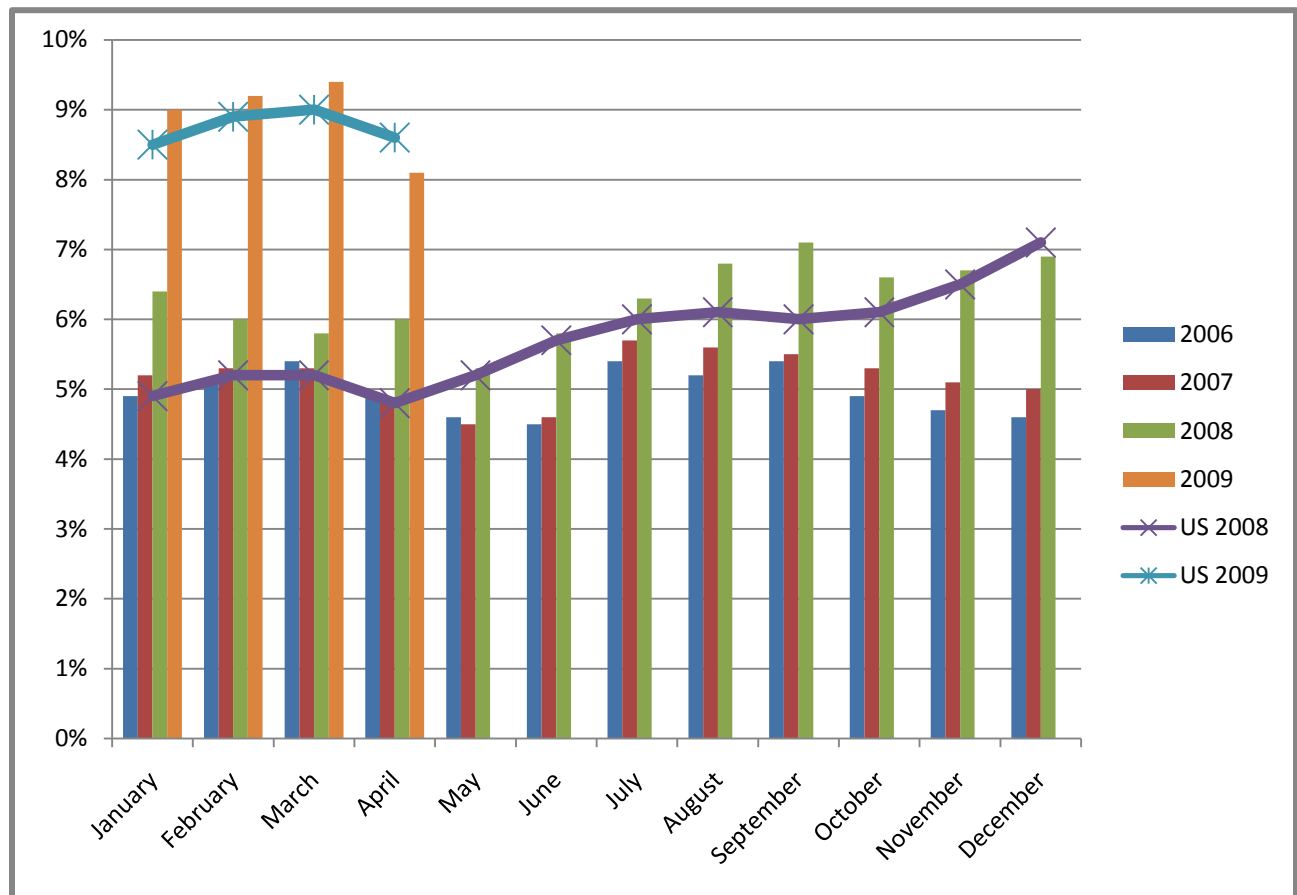
Source: MERIC QCEW

The total employment for the study area was 821,215 workers of which 25 percent is concentrated in the corridor region. Traditionally, employment trends for the region show a rise in employment in the second quarter, a small contraction in the 3rd quarter, and a rebound in the fourth quarter. Throughout 2008, employment levels followed the overall seasonal trends with the exception of the fourth quarter. Despite employment growth in the corridor region, the losses in the non-corridor region resulted in a 0.8 percent decline in overall employment. Figure 2 shows the monthly unemployment trends for the St. Louis, MO, metro for 2006 through 2008. The seasonal unemployment trends hold for each year; however, after June of 2007 the unemployment rates are greater compared to the previous year. This steady rise in unemployment has been consistent with national unemployment, as the two US trend lines demonstrate.

¹ Data provided only includes first quarter of 2006

Figure 2

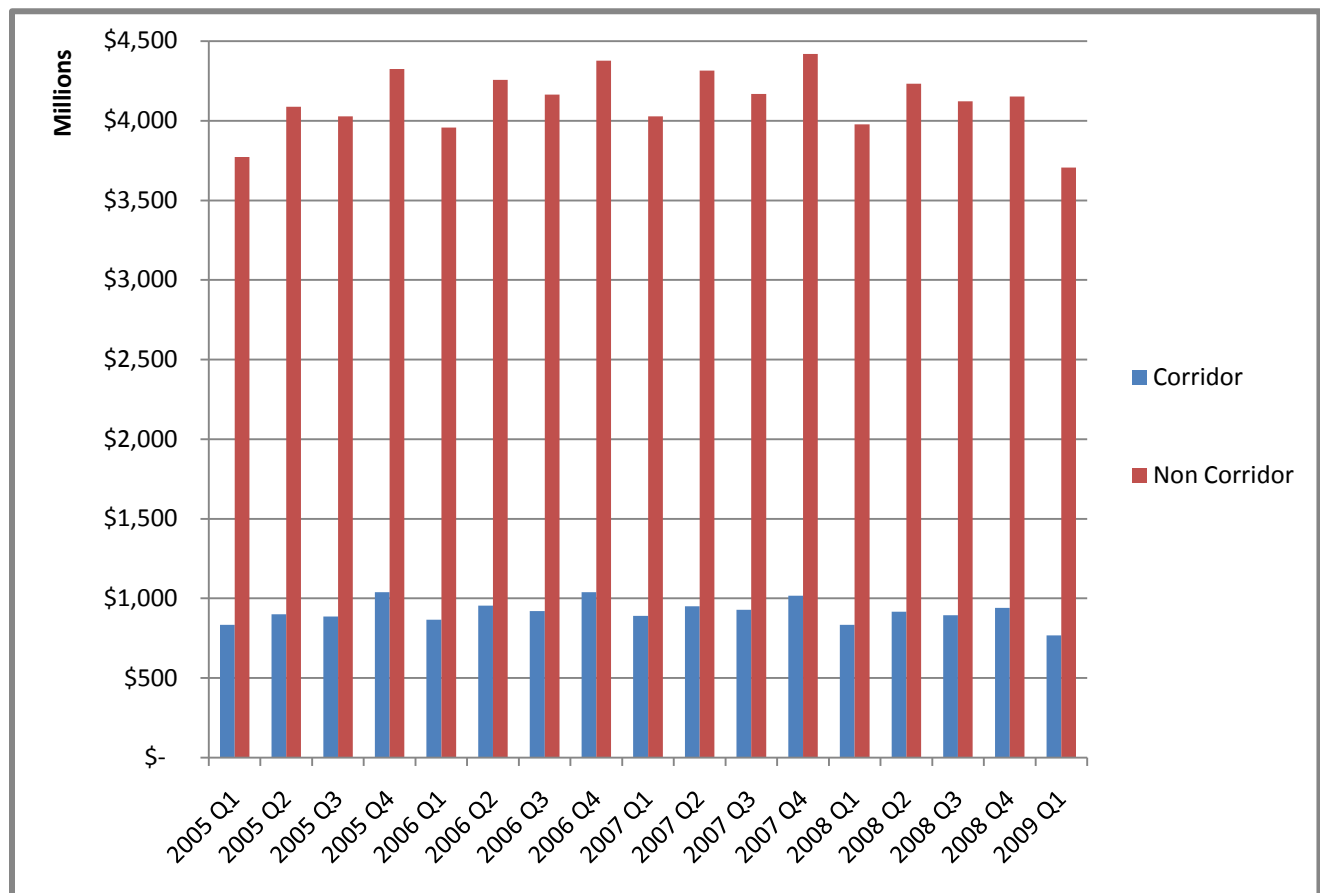
Unemployment Rate: St. Louis, MO Metropolitan Area



Source: MERIC

The combined taxable sales for the region (City and County of St. Louis) was \$5.1 billion for the fourth quarter of 2008 and initial analysis of the first quarter 2009 shows total taxable sales dropping to \$4.5 billion. When compared on a year-on-year basis, the first quarter 2009 taxable sales revenues dropped \$349 million dollars from the first quarter of 2008. The graph below shows the total taxable sales for each quarter, from first quarter 2005 to first quarter 2009, in millions of dollars. As Figure 3 indicates, the taxable sales for the non-corridor region are roughly four and a half times larger than the taxable sales for corridor region.

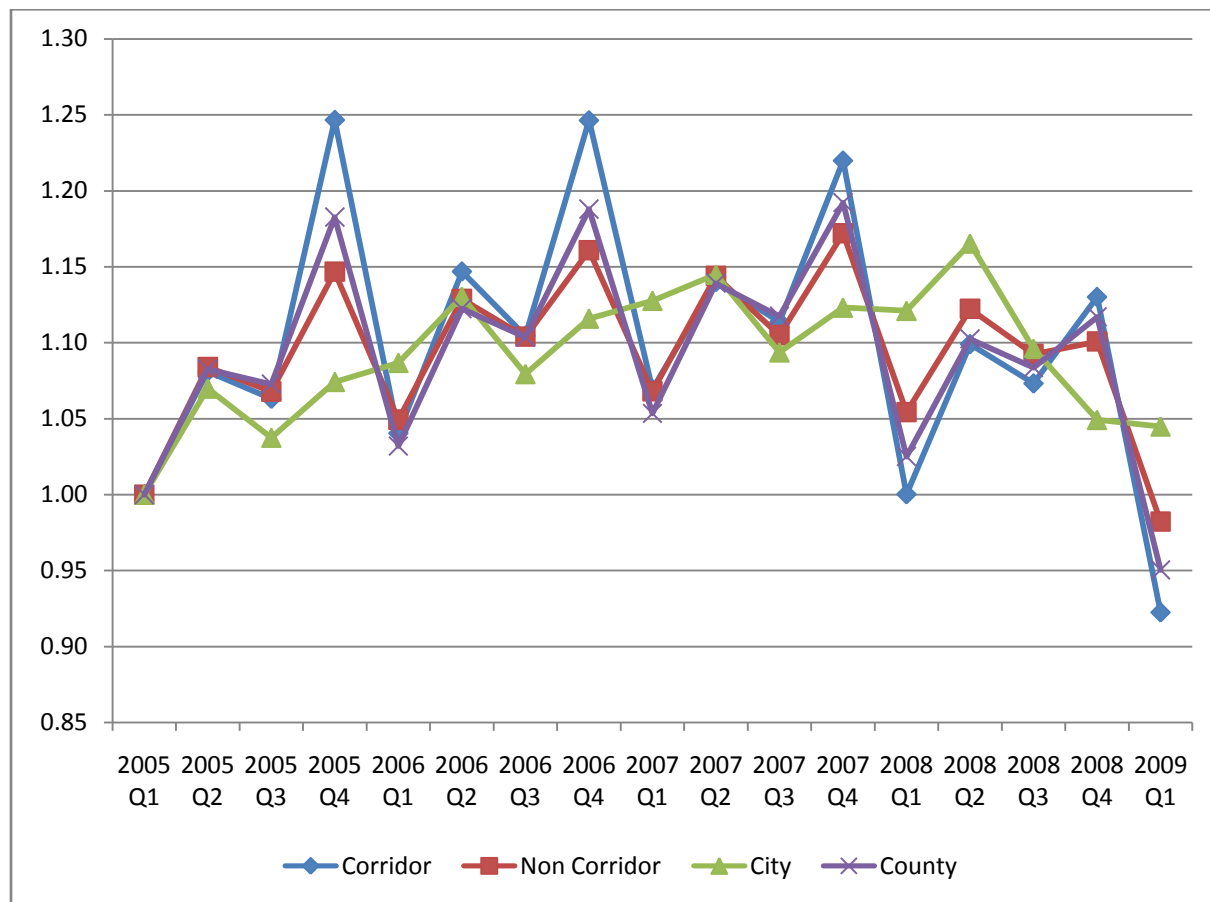
Figure 3 Taxable Sales by Region



The seasonal taxable sales patterns are best seen in the taxable sales growth index in Figure 4. The index demonstrates quarterly taxable sales growth by each region in the study area. Each year, sales follow a quarterly cycle where the lowest sales take place in the first quarter of the calendar year, the second and third quarter show some degree of recovery, and then the final quarter of the year has the largest sales, which are traditionally boosted by holiday spending. The overall growth for all regions followed a similar pattern, maintaining a consistent level of positive growth until 2007, where the fourth quarter 2007 growth fell short of the previous years, and was followed by a significant drop in taxable sales in first quarter 2008.

Although sales did recover over the course of 2008, they remained below 2006 levels; with the exception of St. Louis City for second quarter 2008. The initial analysis of the 2009 taxable sales data shows that taxable sales have dipped below first quarter 2005 levels for all regions, with the exception of St. Louis City. Although the taxable sales have declined in the first quarter of 2009, this is consistent with historical trends. The industry specific analysis of first and second quarter 2009 taxable sales data will provide a better benchmark of overall economic conditions.

Figure 4 Taxable Sales Growth by Region



Conclusions and Future Steps

Thus far, it is difficult to isolate the impacts of I-64 on the St. Louis economy from the larger national economic conditions. Additional analysis of the 2009 economic and fiscal data will help assess the implications of the I-64 closure and the overall economic health of the region. Future steps will include the analysis of the detailed real estate data from Torto Wheaton Research (TWR). Additionally, the assessment of economic cost attributable to changes in traffic, travel delay, and vehicle miles traveled (VMT) due to the western and eastern closures of I-64 will be assessed in future reports.

The data and analysis in subsequent quarters will provide a better understanding of the magnitude of the transportation costs and their impact on productivity and competitiveness. Further analysis will offer insight on the project's effect on retail sales, customers and visitors, particularly among Corridor businesses. Finally, it will help to ascertain the extent to which national economic conditions are influencing the results.

Appendix A: Communications Data

– Online Survey Summary

Appendix A

Communication Information

Summary of Online Comment

Eastern Closure 2009

Respondents were given multiple opportunities to provide comments in the online survey. Each opportunity corresponded to a different part of the survey.

The comments in black were previously released in a supplement to the March 2009 Quarter Report. [The comments in blue are the most recent comments. They have been received since the March report was generated.](#)

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Impact of Closure Comments

The following comments were left in response to the statement *If you want to provide more details about how the closure has affected you, please do so here.* The comments are presented as they were received.

I was pissed that the website listed that Oakland and Clayton bridges would not be closed at the same time and then all of a sudden they were.

Since I am retired and no longer attend school--my schedule only impacts me as far as convenience is concerned. I live in Lake Forest Subdivision which provides a very inconvenient challenge when attempting to reach the highway going west--or stores to the south of me

Completing the Hampton bridge will make life a lot easier from the south side to midtown

I have totally shifted my route and avoid the area.

I work in the western half and now have the open I-64

It has put 40 minutes or more daily on commute times.

I have not changed it from the closing of the western side, I still have to allow extra time due to reach my destination.

My company moved from Clayton to St. Peters prior to the closing in part to avoid disruptions.

This part of the closure hardly affects me at all. The other part significantly affected me.

I think the workmen did a great job , the only thing I do not like I can't see 40 from my window at WORK .

During the eastern closure, I will be using the Forest Parkway route, as I live by the Mall at Brentwood and Eager Road. Unfortunately, Highway 44 is too far out of the way south of me to use for commute to work.

I am a Muny season ticket holder, and I'm concerned about the eastern half construction will effect my commute to the Muny from the Chesterfield area.

Takes a few minutes longer to get from HiPointe to the Richmond Heights P.O. or Sam's Club. Not that big a deal yet.

We live near 270 and Ballas and work near 40 and Kingshighway in the CWE. Before, we traveled East on Olive and took 170 South to 40 East to the CWE. Now, we plan on traveling South on Lindbergh to 40 and taking Forest Park Parkway to the Clayton Metrolink station, toward the CWE. Even though the travel time may not change, enjoying the new highway will be a treat!

I go to work later to avoid the traffic and work later to avoid the home traffic. I will also limit greatly going out with my friends in St. Charles/West county. I have rescheduled business meetings in West/North county to make them closer to my home in South City. I am also going to travel by train to KC & CHI so that I can

park in the city and not drive to the airport. North STL driving at night when I am a single woman is not a smart idea with inclement weather.

today 12/16/08 they changed the time of the lights at forest park parkway and skinker and traffic on skinker was horrible. There was bumper to bumper traffic from 1/2 mile south of Wydown until you crossed the parkway. And southbound was backed up past Olive. I understand that you need to improve the traffic flow on forest park parkway, but do not cripple the north and south bound routes. What is going to happen on roads like Skinker when Hanley is closed?

At MODOT's suggestion took Page this morning (coming from St. Charles) all of the way to Kingshighway. The street was not plowed past I-170. So to get to WU I should go N on 170 and get off where? FPP is past capacity. If a road is going to be recommended as an alternate route then it should be maintained

I think MoDot attempts to spin that drivers shouldn't take the Parkway as a waste of energy. The fact is that most believe the sit time there is less than the sit time to get to all of the alternates you suggest. It will be the headache until the east side is completed. As we have all ready the county to the city is like a funnel and with the amount of business community traffic along with heavy residential there is simply no way it can't be more of a headache than the west side was.

I still have not found a safe route all the streets are closed or way out of my way of the places I need to go, it really hurt that Oakland also closed to skinker. Today was awful and had car trouble sitting in the long traffic lines. I had to cut off onto a side street and then that street didn't go thru had to turn around, ended up on big bend and tons of traffic...there was no safe clean streets to go.

Up until the eastern half closure, my job was terminated, so I no longer commute east of I-170.

The eastern closure has killed St. Louis traffic. The first 10 days were worse than the worst day of the western closure ever was. There is no path from East of 270 to downtown. With the western you could drive Clayton all the way down and it took less time than driving out to 270 and around to 44. Now there is just no path. There are no roads that go all the way downtown. Manchester is a joke as you cannot get by Hanley without a 20 minute delay at Hanley. Once by it you are again stuck in 2 places. Forest park parkway cannot handle the load Clayton did and is a mess. There is just no path. This brings up the question of why Clayton to Kingshighway in front of the zoo is closed. All you are going to do is repave it. This can be done with it open. 200% of your effort should be in getting this short eastern most section of phase 2 open. In fact you should open 1 lane east and west that would stay open during the entire project. This would solve your current crippling of St. Louis!!!!!! With this section closed Clayton is lost as a means to get downtown. With this open you gain 2 lanes all the way.

It is more like 40 mins earlier but you don't have an option for that.

Highway 70 traffic has been negatively impacted - the reversible lanes need to be utilized the way they were intended - eastbound in the morning and westbound in the afternoon.

Unable to shift commute times due to children's school schedule.

There are NO main thoroughfares from the south/east direction on I-64 all we have are city streets and Forest Park Parkway, which is a disaster and we were told not to take after the first day that 30% (your calculations) went that way. I have yet to spend less than 1 hour 30 minutes one way in my commute to work when it typically took 35-40 minutes. I went several ways in an effort to find the best way before the closure, and NO WAY came close to my normal travel time. MODOT stating that all is going good is far from the truth!! Why don't you survey some of the actual drivers on the road. I work with 10 others and all have the same opinion and travel time added to their day. The north/east at least had Page, Olive, Lindbergh we have city streets with tons of lights!!

I take Forest Park Parkway to I-170 in the am, I commute opposite the main flow (west bound), so not many issues except at FP Pkwy and Big Bend.

It's ridiculous that drivers are advised to change their work hours; "shift your commute time." Most employers are not that flexible or can't allow workers to change their hours. I work in the health care industry and have patients who would be negatively impacted by such a change. MODOT is so out of touch with the day to day reality of workers, it's insulting!

I'm a real estate agent, so I work at all hours, travel most roads. I have to schedule longer drive times to be sure I'm on time.

We travel from Zip 62062 to School in 63131 and then I travel to work in 63103. No matter how you slice it ... it is a bad commute everyday.

I live downtown and I am still trying to find a good route to Westport. Page is good, but I do not feel safe, especially in the evening. The number of open businesses, not counting liquor stores, is minimal, the traffic lights are not synced, and I find myself sitting at red lights with no cross traffic. Why aren't those lights flashing? Also, when using the Forest Park Parkway, there are no signs for where the next gas station is. The first half was bad, but this closure seems to be MUCH WORSE. I wonder if the spokespeople for this project really know how/where St Louisans live and work, also do they understand why Page Ave is under utilized? Mr Waelterman should take this route and see how safe he feels, and consider whether he would like his wife to take that route at 7 pm.

It seems that everywhere you go the stop lights are always red, and the people who don't go the speed limit in the left hand lane block the road. (they are usually on the phone)

I feel it was a poor choice to close Oakland at the same time that the highway closed. Surely, this could have stayed open until the highway was back up and functioning. This only caused more headaches and travel problems. I do not feel this project was well planned at all.

Although we live in the county, we did a lot downtown. The only things we do now are things we have to do for the kids--Upper limits, but other than that, we're avoiding it.

The biggest impact has been McKnight Rd. It has always been congested going North getting to highway 40, but now is worse than ever. There is a stop sign at a neighborhood right before you get to the highway that seems to really slow things down. For the last few days it has been backed up well past Litzinger. It's unfortunate because I just need to get to the interbelt and I was really looking forward to getting to it from McKnight.

I can now travel on the new section of 40 to get to work instead of up and down Clayton Road.

The closure may affect my social life to a degree, but I know it's temporary. Keep up the good work

I have always taken I-70 to commute to work. Traffic on 70 did not seem to be effected in the first closure, but the recent closure has effected traffic. I have a hard time understanding why the express lanes are not opened eastbound on 70 in the mornings and westbound in the evenings?

you have cut out all my "short cuts" and "secret ways", i.e. oakland to mackland to weise (thank you!!!!!!!). It is very difficult to get about, and just recently you stopped people being able to travel both ways on Berthold! I am still able to get to the areas I need to go to or want to go to, but what would take approximately 10-15 minutes, is now taking 1/2 hour to an hour.

vist the area 2 times a month. difficult finding routes when not entirely familiar with area. Would like to see a mapquest type program to assist.

I now do not leave my house until 8:15 to 8:30 becausue of the tie ups on southbound I-170

Because I travel North in the morning and cross I 64 somewhere between Big Bend and Hampton, I must route around the street closures. Not a real big deal until Hanley AND Big bend close at the same time.

I now have to leave about 30-45 minutes earlier than before. Now that the second half of 40 has shut down, things are EVEN WORSE than 2008. Did anyone think this project all the way through? Also - Why did you stop showing the accident stats in your Quarterly Reports? The only reason I can imagine is that accidents are WAY up since the closure. You can't restripe lanes, making them too narrow, then re-route thousands of cars and semi's, and not expect an increase in accidents. Why is no one tracking the personal stress factor? Does it not matter to MODOT?

Having to leave 2 hours earlier & getting home 2-3 hours latter because of the closure is insane. IT SHOULD HAVE NEVER BEEN DONE!!!!!!!!!!!!!!

backup on southbound 170 exiting at Hanley is bad, even hazardous. Need to adjust the light at Hanley to let more traffic exit the highway. Not sure why this has recently gotten so bad unless they changed some signals as it hasn't been that bad since the first week of the 40 flip. It shouldn't take 20 minutes to get from

Forest Park exit to Hanley. I have tried leaving work earlier (as much as an hour), same problem.

ACCESS TO HWY 40 WEST OF I-170 IS IMPOSSIBLE BECAUSE MCKNIGHT AND BRENTWOOD TRAFFIC TO THE HIGHWAY IS BACKED UP AT RUSH. THE TRAFFIC LIGHTS DO NOT SEEM CAPABLE OF FLOWING TRAFFIC EFFICIENTLY. THEREFORE, I STAY MORE ON SIDE ROADS AS IF THE HIGHWAY IS STILL UNDER CONSTRUCTION.

I travel to and from work from the Metro East (O'Fallon, Illinois) to Chesterfield, Missouri and travel either 255/270 or 44 which adds around 10 extra miles to my commute and an extra 20-30 minutes commute time and more money in gas.

I must now take manchester to hanley to 170

The closure of the road negatively impacted the amount of business done at my job, and I had been laid off because of it.

This project has been a real pain. MODot is the most incompet branch of this state government.

I don't need the freeway to commute to work, thankfully.

I can get onto 170 Northbound much more quickly! Takes me a little longer to get to the west end areas

The closure has only prevented me from visiting a restaurants during my lunch breaks that are slightly far from downtown.

I have relegated to the expressway and the intersection at Skinker needs some tweeking and soooooon

Honestly, I expected this half to be worse. It isn't the most convenient process in the world, but my drive to work isn't as bad as I thought. Fortunately, I'm not required to be in the office at any certain time. Also, the "back way" (beside the Best Buy in Richmond Heights) around Hanley/Eager is nice. That said, I am looking forward to the new Big Bend exits opening up...hopefully they make the same good time as they did on the western half.

I live on the eastern end of the closure but instead of going to the Brentwood/Hanley area to shop/eat, I go to Illinois.

The major problem I've encountered is the lack of left turn lights along Dale Avenue. It would be helpful, especially at rush hour, to have left turn arrows at Hanley and at McCausland. It is nearly impossible to make a left onto Hanley from westbound Dale Avenue.

I'm retired and do not have a regular commute. I take pains to do my errands between 10 AM and 4 pm when possible. In any case, I try very hard to avoid being out at rush hour. I used to use Forest Park way a lot; now I use it as little as possible, using a Delmar or Vernon route east to Skinker, and Waterman or Lindell to get to my final destination or crossing point to St. Louis city destinations. This isn't good at rush hours but works well for my chosen travel times. I always plan my errand schedule to achieve several errands at once, for example, gas, post office and grocery store, or a trip to 3 or 4 destinations along Brentwood, like PetsMart, Trader Joe's and/or Whole Foods, Target and/or hardware needs at any of the three stores in that area. This saves time, trouble and gas. I rarely drive more than 2 times a week unless I have volunteer work to do, which I can't usually schedule myself, and sometimes I do errands in conjunction with that to save time and travel.

Satisfaction Comments

The following comments were left in response by those who wanted to leave additional input after the satisfaction questions (for example, *Please indicate your level of satisfaction with how well the public has been kept informed about the New I-64 Project*). The comments are presented as they were received.

The problem is not the closing of the highway - it's the way traffic & construction for all alternate routes is being handled. The closing of so many roads and bridges all at once has been paralyzing for the drivers in my area. I'm talking about the combination of the closing of 64 between Skinker and Hampton, the closing of Hampton bridge and the bridge on Oakland over 64, and the attempts nearby to direct the flow of traffic away from certain residential streets using one-way signs and blocking through-traffic from some streets. And then to top it all off, on Mar 6 you couldn't cross the Tamm st bridge by the zoo and drive past the zoo towards Hampton. The traffic was backed up all the way from Skinker to the zoo, stop and go traffic waiting to turn on Skinker. I don't know why you couldn't get through past the zoo. There are no signs warning you of this on the south side of the Tamm st bridge. There should be a lot more signs communicating these changes. I don't know how I'm expected to travel from Hampton and 44 to UCity. It's increasingly difficult. Skinker is a nightmare during rushhour. Forest Park Parkway is gridlocked, and it has ruined any streets that intersect with it. Big Bend is usually ok, if you can find a way to GET to Big Bend in the first place.

6-8 years would have been an absolute nightmare. By keeping us (the public) well informed we can adjust our commutes and/or driving routes to sidestep the current construction zone. It seems like a daunting task to many St. Louisans at first but once they discovered new routes to take everything settled down.

Eager/Brentwood Blvd I-170 are a mess with signage, lane markings etc.,

I live slightly west of Manchester and McKnight. The traffic has been horrendous on Manchester Rd, especially since I have to make a left out of my street. I know lots of people are using Manchester as an alternative (I know I am). I am looking forward to the traffic lightening up on Manchester now. My family lives in St. Peters so we already (today) have taken advantage of the opening. Great job. It's amazing how quickly it was done. I've enjoyed tracking the progress on your website. It's been educational for my kids too. None of us knew just how much went into demo and construction.

Population of the City is more dense than in a 5-mile stretch of highway in the county -- you didn't take that into consideration. Parking on Lindell along Forest Park should be prohibited 24/7 during construction.

Over the weekend I was traveling west on Oakland and tried to turn left (south) onto Hampton to get to Manchester; however, there was a "No Left Turn" sign posted at Hampton and Oakland. So I proceeded west and -- like everyone else -- hit the barricades at the Oakland Ave. overpass and had to u-turn. I am angry that it was stated in the Post that drivers "ignored" the "Road Closed Ahead" signs -- there weren't any! If I was able to see a small "No Left Turn" sign, I would have seen a Road Closed Ahead sign. Furthermore, how did dozens if not hundreds of other drivers also "miss" this sign. I'm not nearly as angry about that overpass being closed early as I am about you claiming there were signs when there weren't any.

US61 signage was lacking. Effects on bicycle commuting appear to have been ignored for a year. I feel I was not told the truth about: - When work in my back yard would happen and be done. - What was sprayed on the foliage in my yard and what I could do about it.

I am glad the decision to complete the work in 2 yrs vs 6 yrs was made. Now, half of the highway is completed. Also, the coverage on local news has been good in keeping me informed of the progress.

The local media and Dan Galvin have been doing a superb job keeping us informed,

While the new section just opened, we could tell travel East and West via Olive has lightened substantially.

I wish all government-sponsored activities ran this well. Excellent communication and media relations.

While the job, as designed, has been managed well, I question the value of doing all this work to end up with a product no better than what was there before.

It's shocking to see new bridges going in no wider than the old bridges, and the elimination of secondary access points (Galleria Parkway, Laclede Station Rd, etc.), that previously allowed us to avoid the horribly congested ones.

Also, it's hard to understand why this job takes so long and why there aren't more crews and why they aren't working 24x7.

I think it overall was handled well until now, but I am concerned with the north / south routes coming up.

It's unreasonable to have Oakland Avenue closed to through traffic when there are so few alternatives for city dwellers to travel west into Clayton. It's a perfectly good stretch of road that is not being utilized.

I respond satisfied because obviously the 6-8 years would not have been a piece of cake but the east side is going to be ugly--you have Wash U right at a busy corner of an alternate and you have Forest Park sitting right where 10K people attend the Muny....you had none of those things on the west side.....

I hate that this starts in the dead of winter and bad streets its dangerous

Outstanding management, planning, and implementation. I can only feel disappointed that the additional sound walls were not already in place in this time since it is apparent that beyond the roadway, the project actually was NOT completed earlier than normal in whole.

The western closure was not as impacting as we all feared. I would give you an A+ on this. The eastern closure has crippled the center of the city. I would give you a F--- on this. All efforts must be given to getting 40 in front of the zoo open so that traffic on clayton can flow. This is a high high high priority section of the project.

A bunch of money was spent on the project completion count-down calendars for the highways - they have been turned on for a few days, but not regularly. Why was so much money wasted to not be used?

I take 70 in and the directional lanes need to change to Eastbound in the morning and west in the evening.

When I was a kid, I-294 around Chicago was completed one mile per week. They had to build bridges, move homes and started from scratch. They had almost unlimited labor resources and was quite a project. One Monday they were behind my house moving our neighbor's homes out of the way and grading the roadbed, by Friday they were pouring concrete, and on Sunday the road was stripped, signed, and it was done. Amazing. I assume blending the old and new takes longer.

Closure of Eastern half has impacted me so badly that the quality of my life has been doing down.

The ramps connecting west bound 64 and 170 have work zone speed limit signs of 40 mph but when I travel these I am the only one going this speed and have noticed other drivers upset that I am going this slow. Is this the correct speed or are the other drivers just not paying attention to the posted limits?

The Oakland closure and Dale Ave is a perfect example of the poor communication. I was traveling east on Eager on Jan 2nd and saw the signs for Dale Ave. My mom even pointed it out to me as I was heading to Dale Ave. Well, I ignored the signs because I knew that I could turn at Dale off Hanley...WRONG. I heard about this for the first time today...kinda late. Also, I think the alternative routes should've been better explored. Example, why is Jefferson Ave still not open southbound??? Also, closing Hanley and shifting the traffic to Brentwood was simply a ridiculous thought. Why didn't someone test these routes out on normal people before they just knock down overpasses and expect us to figure a way around it.

I think the western half of I-64 is beautiful!!! I hope all of the new plantings survive and look great for years to come. Thanks for making I-64 (west) beautiful!!!

Sometimes the signs don't make sense or they don't warn you until you're right there. I don't have any specific examples, but I do remember a couple of times thinking I wish I knew this about 1 mile ago. I do really enjoy the new Western side of the highway.

The opening party was nice to go to, but there should have been people there with info about the carriage rides. We were there looking all over for where they were going to start, waited a very long time, along with many others, asked several people, who ended up giving conflicting info...we finally gave up just in time to see the 2 carriages arrive. 2 carriages for that amount of people? Not nearly enough. And they were small carriages at that. Other than that, we did enjoy being able to walk on the highway before it opened and look forward to doing so on the east part of the highway. Hopefully any activities (other than the bike rides, which were fun to watch) will be better planned and executed.

You have done a GREAT job communicating and getting everything done. My only complaint is the concrete lifeless jungle you have created on hwy 40. I understand home owners may have wanted them (but why did they live there to start with and I question the tactics used to get an agreement), but you have taken away all the charm and life out of the highway. You have even blocked business that I am sure relied on drive-by traffic. PLEASE reconsider creating the concrete vacuum on the other half. It's not that loud, I use to live by it. If it is too loud, move. PLEASE keep the charm and warmth that is St. Louis and don't block it out.

continued problems of grid lock at skinker and forest park continue. Police need to patrol southbound skinker for cars who block private streets and do not keep intersections open. signs are not sufficient and grid locked cars disobey. tickets by the gross are in order till behaviors improve.

While the traffic impacts aren't as bad as I thought they would be, I do not believe that doing this project with the highway open would have taken 6 to 8 years.

This project could have been done one side at a time as many other interstate projects are done without too much of an impact to the timeline.

There are enough people and construction workers unemployed that you could have doubled up on the crews and completed the project in less than two years with the total closure concept and maybe even saved some money as completion of the project sooner would have less of an inflation factor. Marsha marshab80@gmail.com

Obviously the Parkway is a mess. I do not understand why Big Band was not rebuilt at the same or almost the same time as Boland Place and Highland Terrace. That way it would be done now and the Hanley overflow would have a reasonable alternative.

The overhead signs, telling us how long the travel time is to a certain highway, are ALWAYS WRONG during peak times. The changeable speed limit signs on 270 are a joke. If I could possibly do 40 mph at 5pm on 270 southbound, I would take back every nasty thing I have ever said about MODOT. By the way, how much did those "Countdown To Completion" signs cost? Those have worked about 10 days over the past 13 months. Another huge waste by MODOT!

The east closure I don't take to get to work - but I travel that exact stretch for church and MANY other activities. Lots of friends live over there. It is INCREDIBLY inconvenient as all the alt routes are heavily trafficked and MUCH longer. Wish a better plan could have been made for the east close down. The west closure was much easier to find an alt route. But having the whole east stretch closed is killing me!

MODOT deserves credit for how relatively smoothly things have gone so far.

Who ever arranged it had better have been fired for this stupid idea.

you could have done this without shutting down the highway and in far less than 6 years. you can say six years but that is the party line bull crap to get what you wanted. I can NOT believe it would have taken to 2014 to get the job done. While i realize it would have taken more planning and cost a few more dollars, I do not believe it was as much as you are saying. Also, the region has suffered because of the shutdown. I go to St Louis for work because I have to. I did not purchase my seats for the cardinals, rams or the symphony this year or last. I will consider it again in 2010 after the highway re-opens.

Mo Dot should have completely closed the highway for a yr

Gee, the world didn't come to an end, did it???

I can't wait for this project to be finished. It is sapping our city of people, economic activity and vibrancy. I hope that measures are being tackled to bring people back into the city once this is all over.

I am really tired of hearing from the people who nitpick and whine about everything! Some of the questions asked in the newspaper about the project are so picky!

Very smart to close only for 2 years. The impact has not been as severe as many predicted, and the benefit will be great.

you have caused massive traffic jams on streets and roads not equipped to handle the volume of traffic. this traffic has caused destruction of road surfaces with no thought as to upkeep and repair of the destroyed surfaces. the waste of time daily in my commutes during the first section closure caused me to alter my life significantly for one year when the project could have been done nearly as fast by performing the work sequentially on westbound lanes and then east bound lanes with total closure for the times needed to destroy and rebuild bridges. i hope that the surface is better built than the deteriorating surface of I-170 which has large holes in it already.

MODOT should insist that StL news agencies refer to the interstate by its true name, I-64. 40 is not the name of the interstate, so it's not I-64/40. If anything, it should be I-64/US 40. But no one in St Louis refers to it by anything other than 40 or Highway 40. The superseding name is Interstate 64. Signs, news updates, and other information should refer to it as such.

Just never heard of an interstate/freeway being closed in the middle of a major city; traffic in a city is to be expected...I'm just sayin.

I live right by the intersection of Forest Park Pkwy and Skinker (I live on Waterman). Traffic in the morning, since the Eastern portion of 64 closed, has been a NIGHTMARE! I never take Forest Park Pkwy North, to get to work anymore, and I certainly do not take it coming home. The changing of the stoplight timers has made the situation worse. If you don't want people to take Forest Park Pkwy, the timers never should have been changed--this would have made alot more people take alternative routes instead of majorly clogging Skinker. Again, the second half has become a nightmare. I want to commit an act of road rage every single day. Oh, I forgot to mention, since the 2nd half of the closure, and everyone and their brother taking FPP, I have never heard so much horn honking in my life. Even after I finally make it home, it's honk, honk, honk for at least an hour.

I am strongly dissatisfied that Hanley, Hampton and Big bend overpasses will be closed at the same time. Is this a conspiracy to keep the north and south side residents of Clayton road from getting anywhere. On any given day, Brentwood is a mess and then next nearest route would be kingshighway!!!

1) Screwed up on Lindberg to west bound I64. Right lane goes straight, left lane ends. You have it confusingly marked with the right lane ending and the left lane going straight. Really mixed up here? Accidents waiting to happen. (It needs to be consistant and it's done both ways all over town) 2) East bound I 64 @ I 270 ONLY TWO LANES GOING EAST???? That's nuts!!!! What a mess you have created. You have eliminated a lane and caused a backup & accident zone for out of towners. I thought we were trying to make things better? 2 Lanes on east bound I 64 is goong to be a mess for years to come. 3) Spodee both exits suck. East bound exit. Mound of dirt blocks view as you approach intersection at Spodee & Outer Road, Fence totally blocks view of oncomming south bound Spodee traffic, another accident waiting to happen. 4) West bound Spodee entering I 64 has a sharp turn and no barrier. Cars will end up down there and the entrance ramp is too short. I thought you were going to improve it? It's shorter?

I don't understand why the streets in the "Dogtown" were blocked. It is difficult to drive the routes inthe area.

AS I have said before, more attention could be paid to routes north and south across the closure. I live north of it near Delmar in U. City and do the bulk of my shopping south of it, mostly in Maplewood and Brentwood. So far, if I follow the precautions and routes described above, I do pretty well, but I really dread the Big Bend closure, which will considerably lengthen my route for my most frequent errands, especially if Hanley Road is still closed.

Alternative Route Comments

The following comments were left in response by those who wanted to leave additional input after the questions about alternative routes. The comments are presented as they were received.

I had no experience previously with the added lane scenario implemented for I44, I70 and I270. Now that I've driven these roads I am against the practice. This could possibly be a workable solution if large trucks were banned or restricted to certain lanes. For me the time saved is not worth the harrowing experience of travelling in such close proximity to other vehicles.

I-64 closed messages on electronic signs is old news that you ought to have on permanent, long-term signs. I thought the expensive signs were for reporting stuff that "just happened".

The signals on the Forrest Park Parkway are never timed correctly to alleviate the endless bottleneck from Clayton to Kingshighway.

The light at McKnight and Litzsinger was my most favorite improvement. It had been needed for so long and I HOPE it never goes away!

The light at Warson and Ladue serves to slow down traffic quite effectively. You did not ask about the added center turn lane on Clayton. It obliterated the bike lanes so well that I feel my life is in jeopardy riding my bike on clayton when it used to be a most preferred bike route.

I am VERY unhappy, and feel we were deceived that the sound wall would be complete before the re-opening of the western half. As a taxpayer, why does the contractor deserve a bonus payment when procurement of critical materials was not completed on time? I feel the overall project was successful, but I feel this aspect was not at all addressed.

Traffic signals on Union Blvd northbound to I-70, I leave at non peak hour before 6 am, and usually hit 6-7 red lights in less than 3 mile stretch. I find the same with Kingshighway and Forest Park Pkwy.

The S I 270 to W I 64 dedicated entry lane was excellent and I am dissatisfied that it is no longer used. It relieved a cumbersome bottleneck.

It seems that there is no sense of urgency in clearing accidents. Out east, they just push vehicles out of the way and out of the drivers view as quick as possible and then deal with the collision.

the traffice signs on 44 do not ever change - if there is an accident or slow down it rarely tells you about it

Remove or shorten (on the Forest Park Parkway) all of the stoplights on Forest Park Parkway from Euclid to Big Bend - these traffic lights are causing terrible delays on FPP.

I-70 and I-270 the extra lane helped, but on I-44 it made the road too narrow

The extra lanes on the highways probably help but are extremely dangerous!!!! They must be removed immediately upon completion!

The Temporary Lanes are very difficult to drive on. You basically drive on the rough pavement that used to be the shoulder.

During the second half of the project, the congestion on Forest Park Pkwy. has been awful. Much more traffic could be moved through quickly if the traffic lights were timed better. This could be the best alternate route in place of Hwy. 40/64 while it's closed, but instead it has been a parking lot.

Pavement on west bound FP Pkwy between Grand and Kingshighway is pretty rough along the right shoulder.

why isn't there temporary lane addition in shoulder area on I-270 east of I-170? Illinois commuters have been completely ignored by MODOT - to suggest that I-70 is a viable alternative to I-64 as a means to get to Clayton is completely ridiculous.

Traffic light timing changes to support the western half of the construction, now need to be changed back!

From what i see on the morning news, 270 IS HORRIBLE!

I don't have an opinion on this, but I do for the commuting. You have to keep in mind working parents. Believe me, I would LOVE to leave for work earlier or carpool, however, I have two school age children. I have to have a car for emergencies. The kids schedule stayed the same, so does mine. However, now I have to work later to make up for my new start time. I am lucky because my husband picks them up. I can't imagine if I was a single parent trying to accomodate this. Plus, I checked out the bus routes. It takes way too long to get around.

variable speed signs were often not accurate. 511 didn't provide info on alternates to Clayton Road which was my main alternate while the west part was closed.

The addition of an extra exit lane on southbound 270 to 44east has made an extremely positive impact on the traffic flow at that internchange. I hope this will be considered a permanant change after 164 opens.

Trucks still speed on interstates but have narrower lanes. They can be pretty threatening.

metro link needs to handout free "try me"passes with a ridefinder link to single passenger cars lined up at lights at big bend, skinker and debalivere to induce using the metrolink next to them and reduce forest park traffic. I'm sure Wash U students would be ready activist volunteers. Be much more proactive to change st louis attitudes to use light rail and bus. Get more employers to incent the cost of commuting with green methods, carpools and light rail, especially those with parking problems.

The temporary lane additions in I44 and I70 should remain as permanent at the conclusion of the project. Marsha marshab80@gmail.com

Restriping was very dangerous - no shoulders!! Trucks and busses are not staying in their lanes, and wander into mine way too often. The Traffic Response guys seem to be doing a good job, but the incidents are reported on the radio/overhead signs too late to pick an alternate route. And - usually the info is wrong. Wrong lane reported closed, wrong direction on the highway, etc.

I-44 LINE PATCH PULLS MY CAR ALL OVER THE PLACE. IT'S HORRIBLE. NOW I STAY OFF 44 ALSO.

The temporary lanes on 270 and 44 should be made permanent after the I64 project is done. They are more important to traffic flow rather than having the empty shoulders.

Since I didn't frequently travel my alternate route before construction, I don't know if impacts were better or worse.

i do not believe the statements that 6-8 years would have been required to accomplish the task if a different method of construction had been chosen. i think that extra time would have been measured in months.

The message boards are awesome through the metro :-). Keep those working...its awesome! The St Louis City Streets Director is completely ineffective...he is totally out of his league.

The signal timing on Forest Park Parkway is a joke. If you wanted people to stay off of it, you should have never timed the lights shorter to accommodate the idiots who continue to use it. This has caused severe backups on intersecting streets (aka Skinker). Common sense was definitely not utilized in this decision

the extra lane on 44 makes it bumpy and uneven, i think its dangerous

I don't recommend travel on those hwy's as the lanes are too narrow and dangerous. The improvements on the western half do not justify the cost and problems caused. It won't handle more traffic if it narrows down to 2 lanes at any point. We should have left it alone or built a better and larger highway. Improvements that move traffic are minimal. Hey it looks great !

Westbound Dale Avenue at Hanley is a NIGHTMARE at rush hour.

I've not used or experienced the 3rd and 4th services. I have found your on-line service very useful. The signal timing efforts have helped with traffic involving the Parkway, but I'm VERY GLAD that I retired a couple years before this work took place (I worked at the Washington U. Medical School, and I'm pretty sure my commute time would have doubled or tripled. The city of St. Louis has planned especially badly for this trip, with the work on the Jefferson and Delmar Station bridges being done at the same time. It's especially interesting that the work on both of these bridges has taken them at least twice as long as it has taken the state to replace any bridge. I've felt that their notification about these projects to be pretty abject as well. The way I found out that the Jefferson bridge was down almost three years ago has when I started to turn off Chouteau coming west o use it; there wasn't even a warning sign on Chouteau as I recall, just a sudden absence of any street where Jefferson used to be. I assume no one landed in the void below, thought at night it would have been a real hazard.

How to Contact Comments

The following comments were left in response by those who wanted to leave additional input about how MoDOT could best provide them with information. The comments are presented as they were received.

I have seen a few signs, but have noticed almost no attempt to get this info to the public, aside from a few newspaper articles. Oh yeah, and some pamphlets in a McDonalds! What about grocery stores, libraries, malls and many many more road signs.

I would much prefer to go to your web site to read the latest information but the news media seems to be doing a better job of getting the word out of upcoming changes. Today I read in the Post Dispatch about the closing of the Brentwood bridge overlapping with the closing of Hanley. I'm sure glad I read the paper today!!

I like the MoDot Emails sent out on a weekly basis

I like receiving email updates on the I-64 project.

Local television news and morning radio has helped us the most.

I tried to map my ride and it isnt working for me. I need to find sites that truly are working with the closings.

The regular emails from MoDOT have been by far the most helpful for me and my family.

our office on Big Bend had a representative on MoDot come to our office with information, hand outs, answered all our questions!

email, email, email road closures BEFORE they are closed.

it doesn't really matter how you notify the public about changes they don't notice them or read them.

It's a shame the countdown signs aren't always "on" and functioning.

I like the flyers that I have seen at my gas station at dale and hanley that have been published and distributed by MoDOT

More display boards on alternate routes

I don't have a TV, get a newspaper and rarely listen to the radio. So I would go look for info online as I heard about it. But it would have been wonderful if perhaps you all would have partnered up with the various business/companies/organizations around the metroplex to equip them with info and alt route suggestions to communicate to their employees (or to at least give them the info/option to sign up for any newsletters/emails that you all might have provided). With the west closure, I did move from the city to west county since 64/40 was what I took every day to work. The people running my company didn't know any more about the project than I did.

*I get frequent update information from the Richmond Heights e-mail alerts
See previous comment about calling I-64 only I-64 rather than mentioning
Highway 40*

The message boards are awesome...they're great :-)

Placed on the road to receive the work one week prior to construction.

I no longer take the daily paper, so that is less useful to me. TV news and on-line notices are most effective for me, though I think that radio is probably useful for many people, who listen while they drive, and the signage about closure on the feeder routes are also very good, because they allow drivers to plan alternate routes on the go, and avoid the centers of real congestion. I'd still like to see more information about north-south routes about the closure, and I think that on future projects the highway department would do well to remember that the St. Louis region goes a very long way north and south, and many people commute or have necessary contacts which require them to use mid-area east west roads on a regular, frequently daily, basis. They could also try to see that St. Louis and other towns near such projects work harder at having their road projects near such construction in better order, that is, finished, before a major route is taken down. The Delmar Project is a prime example of such a misjudgment, even at the times of day I travel, I've seen two block long lines of traffic creeping across the bridge in the single lane traffic. I can only shudder to think what it must be like at rush hour.

Alternative Website Comments

The following comments were left in response by those who responded to *If you heard about the closure through one or more sites not listed above, please tell us which site(s)*. The comments are presented as they were received.

[KWMU](#)

[KWMU - 90.7 FM](#)

[TheNewI64.org](#)

I will add these sites to my favorites and check them out.

[KWMU](#)

[stltoday.com](#)

i watch info on thenewi64 and am active follower of the changes, i'm not at all standard commuter.

[msn.com](#)

[Fox News FNN.com](#), [Google.com](#), [Googlemaps.com](#)

[mapquest.com](#) and [maps.google.com](#)

[tv 11](#)

Richmond Heights citizen e-mails

I-64 Project Website Comments

The following comments were left in response by those who responded to *What additional information would you like to see on the I-64 Project website?*. The comments are presented as they were received.

Keep us informed on what "leftover" work you are doing on the western half of the closure (I noticed today that soundwalls are not done yet)

When closed areas (eg crossroads, bridges) will reopen.

I love the maps. Very interesting.

Clear maps showing alternative routes across the closure.

The New I-64 Economic and Regional Mobility Study

Quarterly Report #7

July 2009- September 2009

HDR

Before the Closure

Please indicate how much time it takes you to make certain trips now compared to how long it took you before the closure.

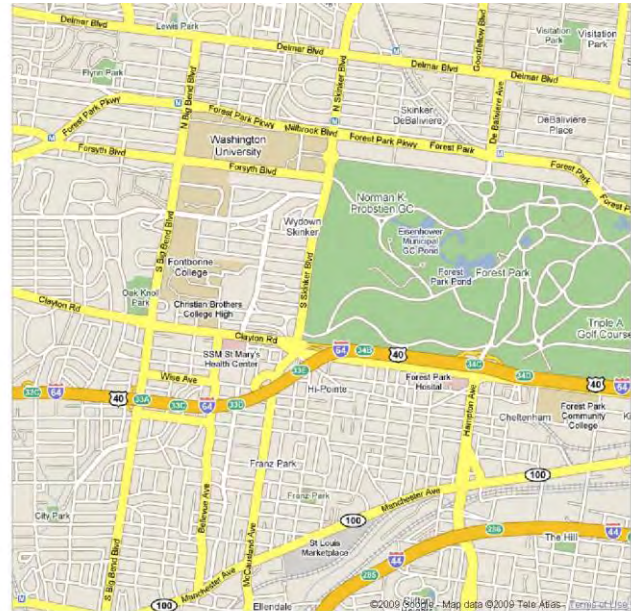
	Less than half of current time	Same amount of time	1 to 5 minutes longer	5 to 15 minutes longer	15 to 30 minutes longer	More than 30 minutes longer
Commuting to and from work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commuting to and from school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commuting to and from shopping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commuting to and from other errands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commuting to and from other destinations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



1. Executive Summary

On December 14, 2008, the eastern closure began with the closure of I-64 between I-170 and Kingshighway Boulevard. On December 15, 2008, the western closure of the New I-64 was opened to traffic. Partners again implemented their regional command center operations to ensure that any traffic flow conditions were addressed and responded to as the public adjusted to the change in closure along I-64.

This quarterly report assesses the period July 2009 through September 2009 that includes the 19th, 20th and 21th months of the I-64 closure, evaluating the three key areas of **Communications** (MoDOT's provision of information to the public, and the public's response to the project), **Mobility** (the effects of the closure on travel behavior, choices, and traffic flow), and **Economics** (the effects of the closure on businesses within the corridor as well as the economic health of the region). With the eastern closure now in place for several months; the study will begin to focus attention on potential differences between the eastern and western closures. In the 3rd Quarter of 2009, the research team found the following information:



Communications (pp. 2-4)

Surveys indicate that the overall satisfaction level remains high

The Eastern Closure appears to be having more of an impact on travel behavior based on responses from “where I shop”, “how often I travel to certain areas” and “how well I managing to move around St. Louis

TV News, Internet, Radio News and Roadway Signs still are the leading way to get information on the construction project

Information from Motorist Assist and I-64 Traffic Response on the two survey questions still remains higher than online surveys when asked the same question

Mobility (pp. 5-21)

Traffic volumes continue to be higher on the designated interstate routes and adjacent arterials. Daily volumes are up on Interstates 44, 64, 170 and 270 in certain sections.

Average speeds are down slightly along certain corridors. The range varies from being plus (up) 362% on I-44 eastbound in pm peak period to being negative (down) 10% on I-70 westbound in the pm peak period.

Travel times are up slightly on certain interstate and adjacent arterials and correspond similar to measurements denoted in average speeds above since, these measurements are based on the average speed


Economics (pp. 22-29)

Both corridor and non-corridor wages where lower in the 1st Quarter of 2009

Unemployment in the St. Louis area is tracking very similar to the national trends in both 2008 and the first several months of 2009.

The change in sales from the 1st quarter to the 2nd quarter of this year saw a slight increase for both corridor and non-corridor similar to the previous three years. The 2nd quarter of 2009 was \$490 million less than 2nd quarter of 2008

The taxable sales during 2nd quarter of 2009, when indexed to the 2nd quarter of 2005 fell below 1.0 for corridor and St. Louis County; St. Louis City and non-corridor had a index higher than 1.0



In this quarter, we obtained respondent input via a new online survey and mail-in surveys from recipients of Motorist Assistance and I-64 Traffic Response services. We will continue to assess information received during the eastern closure and compare it to the western closure information received in 2008. This comparison will show any consistency or inconsistency in the two data sets.

During the 3rd Quarter of 2009, 1,266 people have been surveyed to measure their opinions about the closure and how it may have changed their behavior. Two survey instruments were utilized in this research. The first, an online survey, was a detailed instrument designed specifically for this project. For the second instrument, two key questions were also added to the motorist assist surveys distributed by MoDOT operators after providing traffic assistance to motorists in need.

People access the online survey through MoDOT's New I-64 website. 97 responses were generated in July (35), August (34), and September (28). 82 of these responses were by first-time visitors to the survey. 4 people had taken the survey before and another 11 people were not sure if they had taken the survey before. Online respondents tended to be Caucasian (85.6%) and a plurality (39.5%) made between \$60,000 and \$120,000 annually.

Motorist Assist respondents tend to be less affluent than most respondents. People in this income bracket are less likely to respond to mail surveys and online surveys, so two key questions were added to the standard surveys already distributed by motorist assist operators to ensure that the most important questions were asked of the lower income segment. 1,169 responses were obtained from the motorist assist programs (1,015 through MoDOT's Motorist Assist program and 154 through the I-64 Traffic Response program).

Both survey methods indicate that the overall satisfaction level remains high even though the Eastern Closure appears to be having more of an impact on behavior (those indicators shown in darker blue-green in table below) than the Western Closure did.

Online Survey

Based on the online data, the Eastern Closure is having a greater impact on respondent behavior than that of the Western Closure. "Satisfaction with how well managing to move around the St. Louis area with the closure" is noticeably different. Despite this reported increased impact, overall satisfaction with MoDOT remains very high – almost identical to the results received during the Western Closure. The Table below shows all responses received from online surveys for both the 2008 Western Closure and 2009 Eastern Closure for side-by-side comparison.

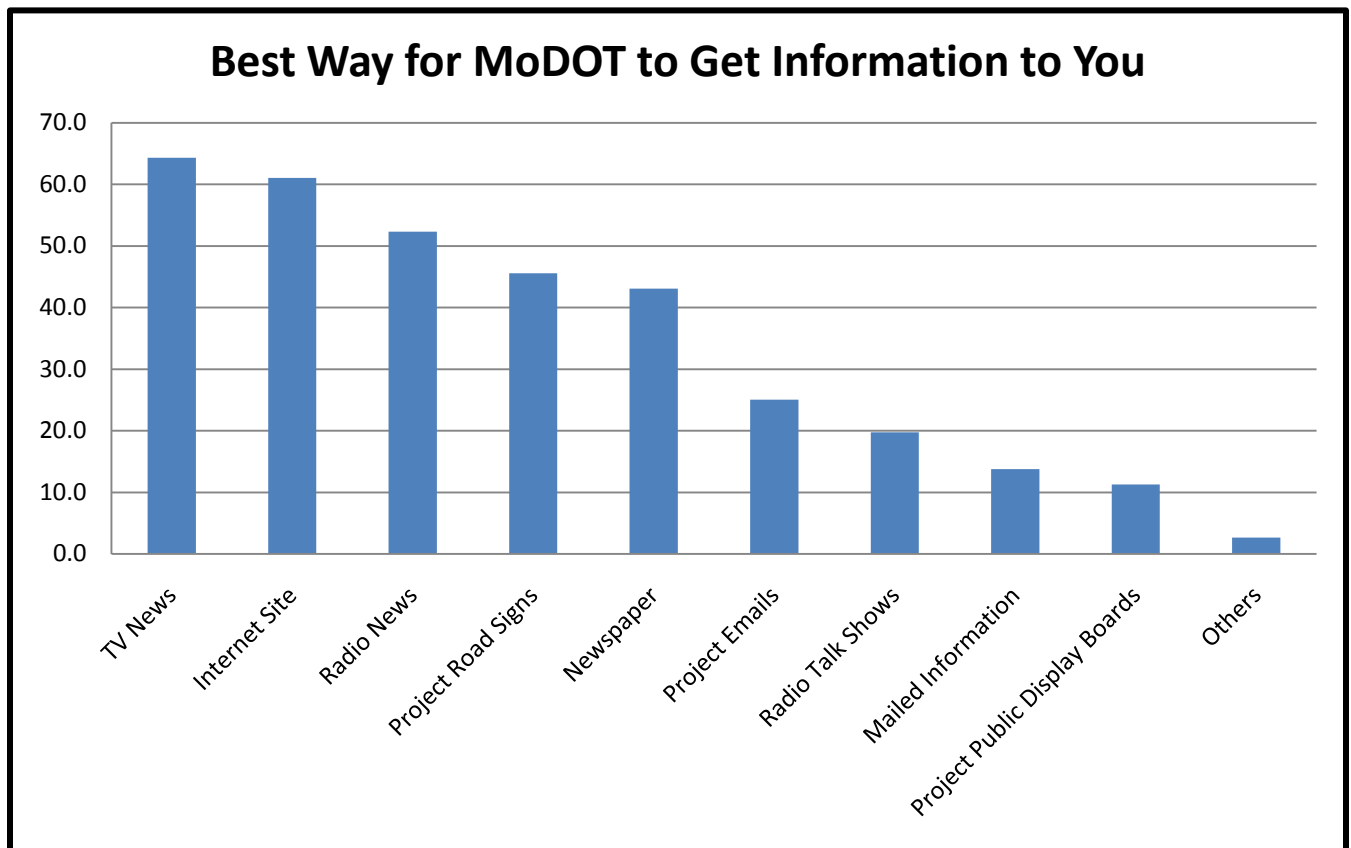
Key Public Indicators - Online Comparison of Both Closures	Western Closure	Eastern Closure	Total
Overall level of satisfaction with how the I-64 closure has been handled	76.7%	77.3%	76.8%
Satisfaction with how well the public kept informed about the new I-64 project	88.7%	86.7%	88.3%
Satisfaction with how well managing to move around the St. Louis area w/ the closure	69.7%	58.7%	67.5%
Satisfaction with timeliness of information being made available	87.5%	87.0%	87.4%
Agreement with “the closure has changed where I shop”	41.5%	46.9%	42.6%
Agreement with “the closure has changed how often I travel to certain areas”	73.3%	79.4%	74.5%
Satisfaction with decision to complete the work by closing I-64 for 2 years instead of 6-8 years w/ lane closures	76.5%	82.7%	77.7%
<i>Survey responses</i>	<i>1,362</i>	<i>342</i>	<i>1704</i>

Respondents are less satisfied with their ability to move around the St. Louis area. It was noticed they were more likely to state that the Eastern Closure has changed where they shop and how often they travel to certain areas. These responses could be the results of several different factors like the adjacent alternative transportation network, adjacent land use (commercial, business complex, residential, recreation, healthcare, etc.), lower response rate, second year of construction, etc. The project team will continue to monitor these changes in upcoming reports.

The best ways to reach online respondents is unchanged from the previous year as demonstrated in the following table:

Best Way for MoDOT to Get Information to You	Western Closure	Eastern Closure	Total
TV News	62.4%	72.1%	64.3%
Internet Site	60.2%	64.6%	61.1%
Radio News	51.2%	56.7%	52.3%
Road Signs	43.2%	55.2%	45.6%
Newspaper	43.0%	43.3%	43.1%
Project email from MoDOT or I-64 Team	24.2%	28.5%	25.1%
Radio Talk Shows	19.8%	19.7%	19.8%
Receive Information in Mail	13.1%	16.5%	13.8%
Project Display Boards at Public Events	10.8%	13.1%	11.3%
Other	2.6%	2.9%	2.7%

The following chart presents the total column to graphically indicate the best way to reach these respondents based on the on-line survey tool.



Motorist Assist

Two key questions were asked in mail-in surveys given out by MoDOT's Motorist Assist program as another way of obtaining information. The change measured since the Eastern Closure has been minor, but in accordance with that of the other methods. People are finding it slightly more difficult to move around, but are still quite satisfied, especially with the decision to close I-64 for two years instead of six to eight years with lane closures. The following table shows the comparison made between the Western and Eastern closures:

Key Public Indicators - Motorist Assist Comparison of Both Closures	Western Closure	Eastern Closure	Total
Satisfaction with how well managing to move around the St. Louis area w/ the closure	90.0%	89.5%	89.8%
Satisfaction with decision to complete the work by closing I-64 for 2 years instead of 6-8 years w/ lane closures	93.8%	95.9%	94.7%
<i>Survey responses</i>	3,837	2870	6707

3. Mobility

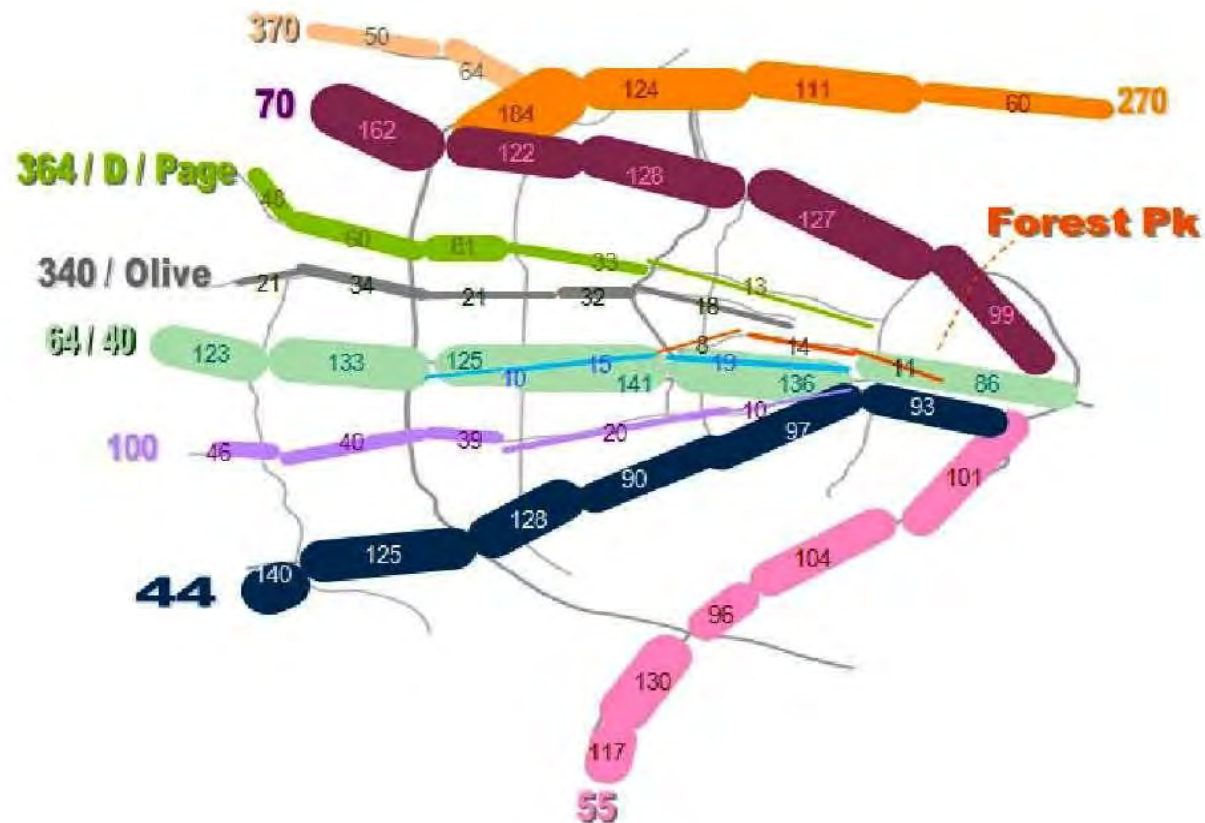
In this quarter, we obtained traffic data for both freeway and arterials. This information shows both baseline and quarterly traffic data for easy comparison of any changes in traffic conditions. Traffic data collected includes traffic volumes, speeds and travel times along various routes near the I-64 construction project.

Sections by traffic volumes, average speed and travel times have been developed. The tables and graphs will be introduced with a short summary of what has been observed.

Freeways

We continue to notice increases in daily traffic volumes along I-44, I-70 and I-270 when compared to the baseline traffic volume data. Also, daily traffic volumes on I-64 west of I-270 are greater than the baseline (pre-construction) level. The four graphs show baseline and July through September, 2009 traffic volumes:

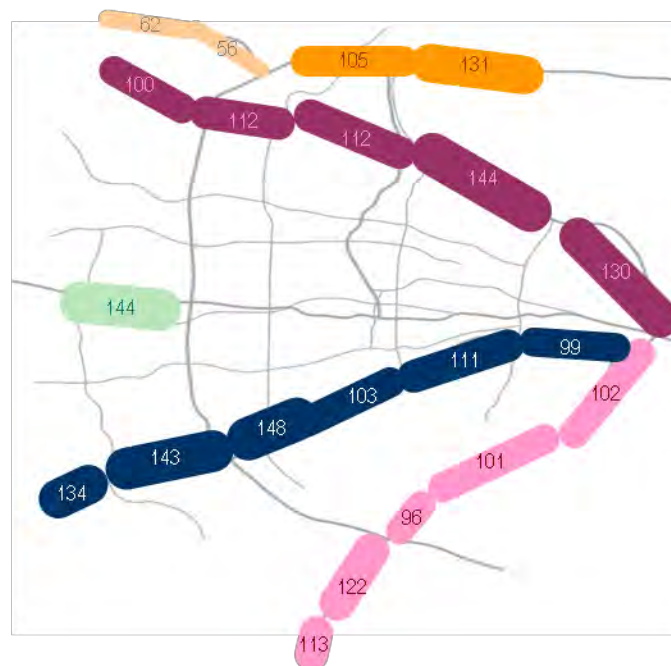
EW Baseline



East-West Corridors Baseline Traffic Volume Graph

7/1/2009 to 9/30/2009

*I-64 STUDY EAST- WEST CORRIDORS
TRAFFIC VOLUMES JULY THROUGH SEPTEMBER*



East-West Corridors 2009 3rd Quarter Traffic Volume Graph

NS Baseline



North-South Corridors Baseline Traffic Volume Graph

*I-64 STUDY NORTH – SOUTH CORRIDORS
TRAFFIC VOLUMES JULY THROUGH SEPTEMBER*

7/1/2009 to 9/30/2009



North-South Corridors 2009 3rd Quarter Traffic Volume Graph

The following table shows daily traffic volumes, and average speeds and travel times information for the PM Peak periods. These selected sites were selected early in the study to designate some control sites to monitor that could potentially experience changes during the construction along I-64 corridor. These freeways were designated and signed with construction signing as alternate routes for potentially impacted traffic. By consistently monitoring the same sites, we can get a general understanding on how traffic is moving in the region. Index indicates how the 3rd quarter of 2009 traffic conditions compares to baseline traffic conditions in 2007. Green highlighted index values show an increase in traffic condition measurement while the red highlighted index values show a decrease in traffic condition measurement.

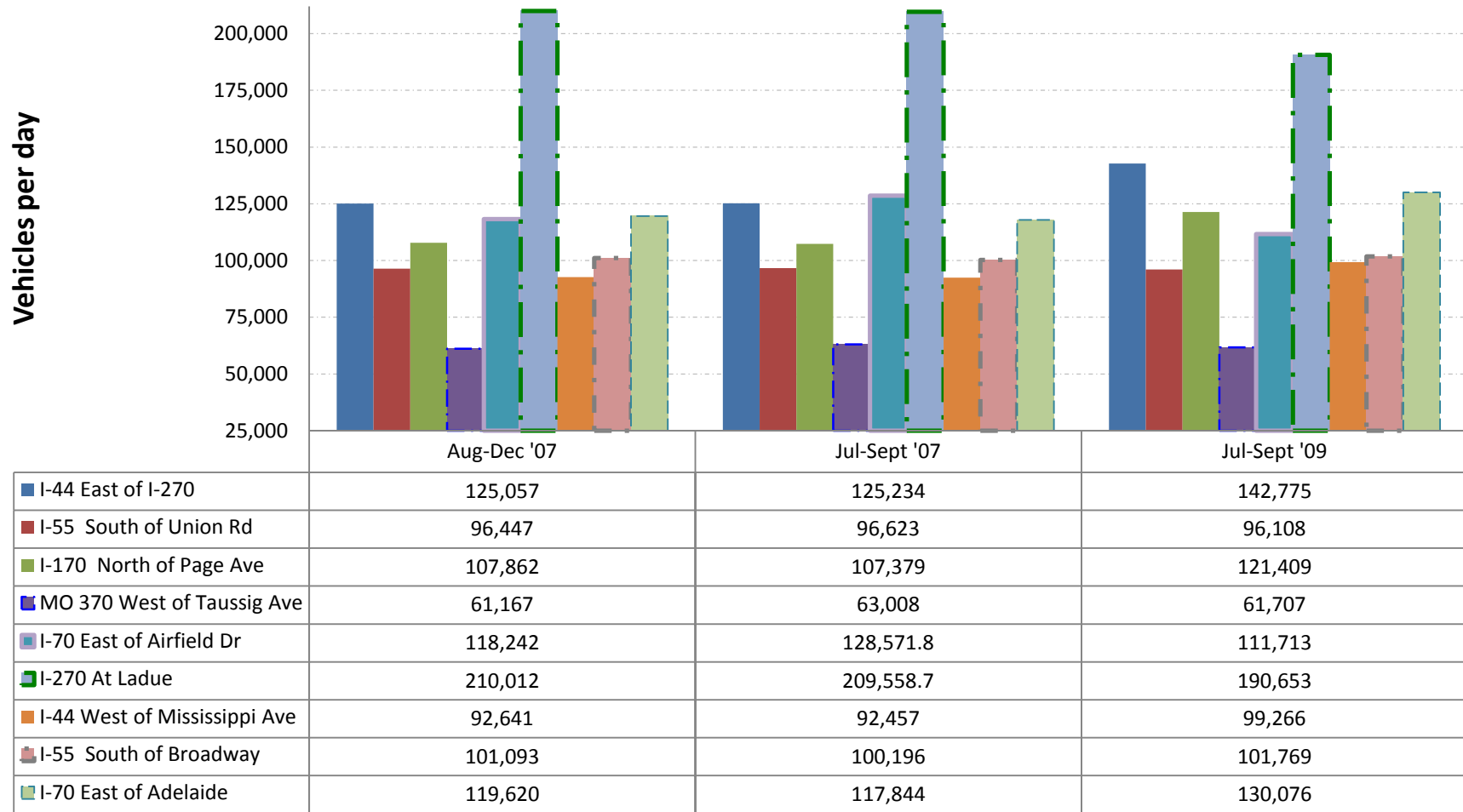
I-64 Study Update - Freeway Information - Quarter 3 July - September 2009

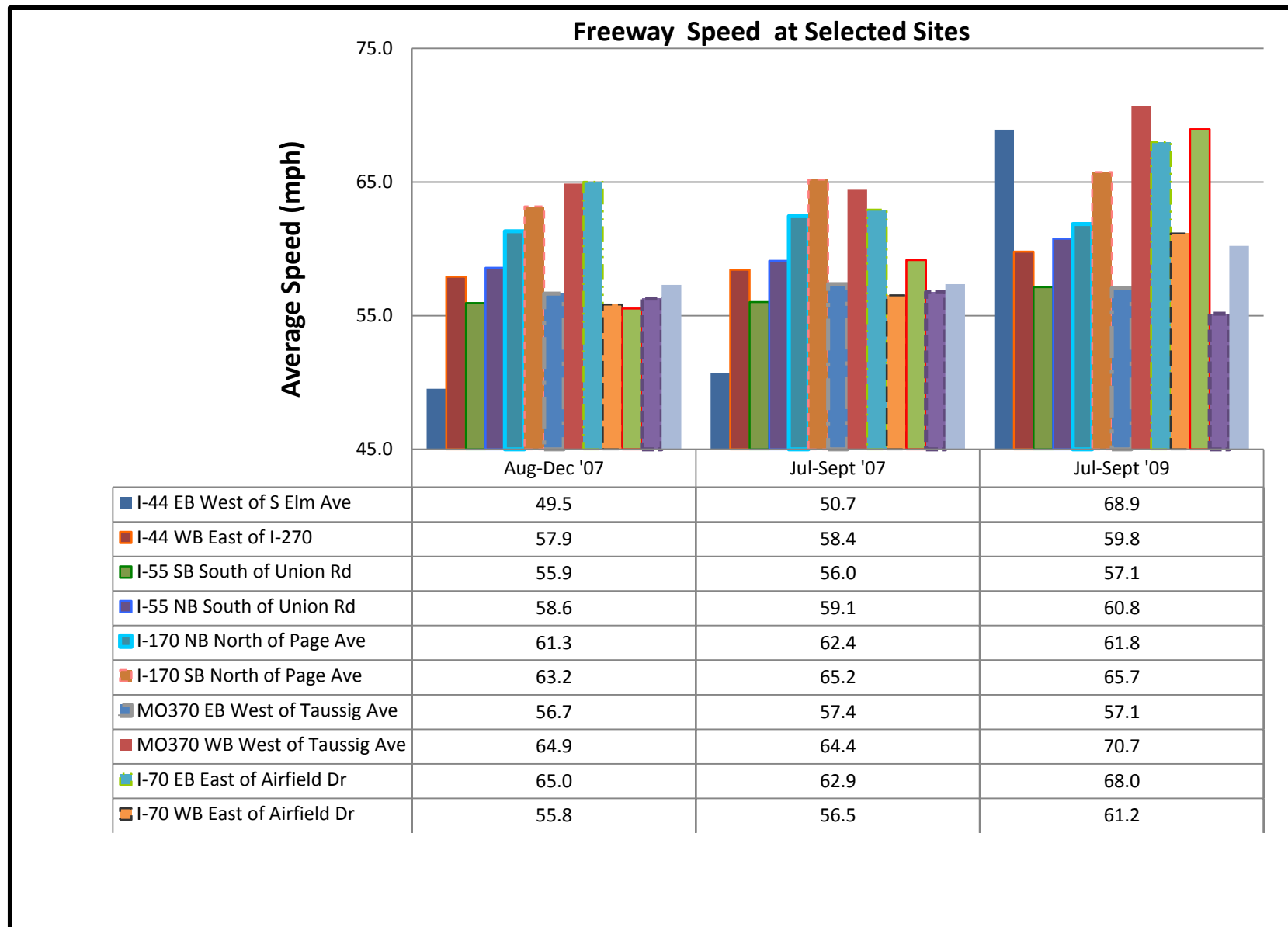
Route	Location	Volume (vehicles/day)			Index	
		Aug-Dec '07	Jul-Sept '07	Jul-Sept '09	Jul-Sept '09/	
					Aug-Dec '07	Jul-Sept '07
I-44	East of I-270	125,057	125,234	142,775	1.142	1.140
I-44	West of Mississippi Ave	92,641	92,457	99,266	1.072	1.074
I-55	South of Union Rd	96,447	96,623	96,108	0.996	0.995
I-55	South of Broadway	101,093	100,196	101,769	1.007	1.016
I-170	North of Page Ave	107,862	107,379	121,409	1.126	1.131
MO 370	West of Taussig Ave	61,167	63,008	61,707	1.009	0.979
I-70	East of Airfield Dr	118,242	128,571.8	111,713	0.945	0.869
I-70	East of Adelaide	119,620	117,844	130,076	1.087	1.104
I-270	At Ladue	210,012	209,558.7	190,653	0.908	0.910

Route	Location	Speed (mph)			Index	
		Aug-Dec '07	Jul-Sept '07	Jul-Sept '09	Jul-Sept '09/	
					Aug-Dec '07	Jul-Sept '07
I-44 EB	East of I-270	49.5	50.7	68.9	1.392	1.360
I-44 WB	East of I-270	57.9	58.4	59.8	1.033	1.023
I-44 EB	West of Mississippi Ave	57.3	57.4	60.2	1.051	1.050
I-44 WB	West of Mississippi Ave	58.6	59.9	58.0	0.990	0.969
I-55 SB	South of Union Rd	55.9	56.0	57.1	1.021	1.020
I-55 NB	South of Union Rd	58.6	59.1	60.8	1.037	1.028
I-55 SB	South of Broadway	61.9	62.2	62.6	1.011	1.007
I-55 NB	South of Broadway	60.6	63.5	62.8	1.036	0.989
I-170 NB	North of Page Ave	61.3	62.4	61.8	1.009	0.990
I-170 SB	North of Page Ave	63.2	65.2	65.7	1.041	1.009
MO370 EB	West of Taussig Ave	56.7	57.4	57.1	1.007	0.995
MO370 WB	West of Taussig Ave	64.9	64.4	70.7	1.090	1.097
I-70 EB	East of Airfield Dr	65.0	62.9	68.0	1.046	1.080
I-70 WB	East of Airfield Dr	55.8	56.5	61.2	1.095	1.082
I-70 EB	East of Adelaide	60.8	62.2	72.4	1.190	1.163
I-70 WB	East of Adelaide	55.6	56.4	50.9	0.916	0.904
I-270 NB	At Ladue	55.5	59.2	69.0	1.242	1.166
I-270 SB	At Ladue	56.3	56.8	55.1	0.980	0.971

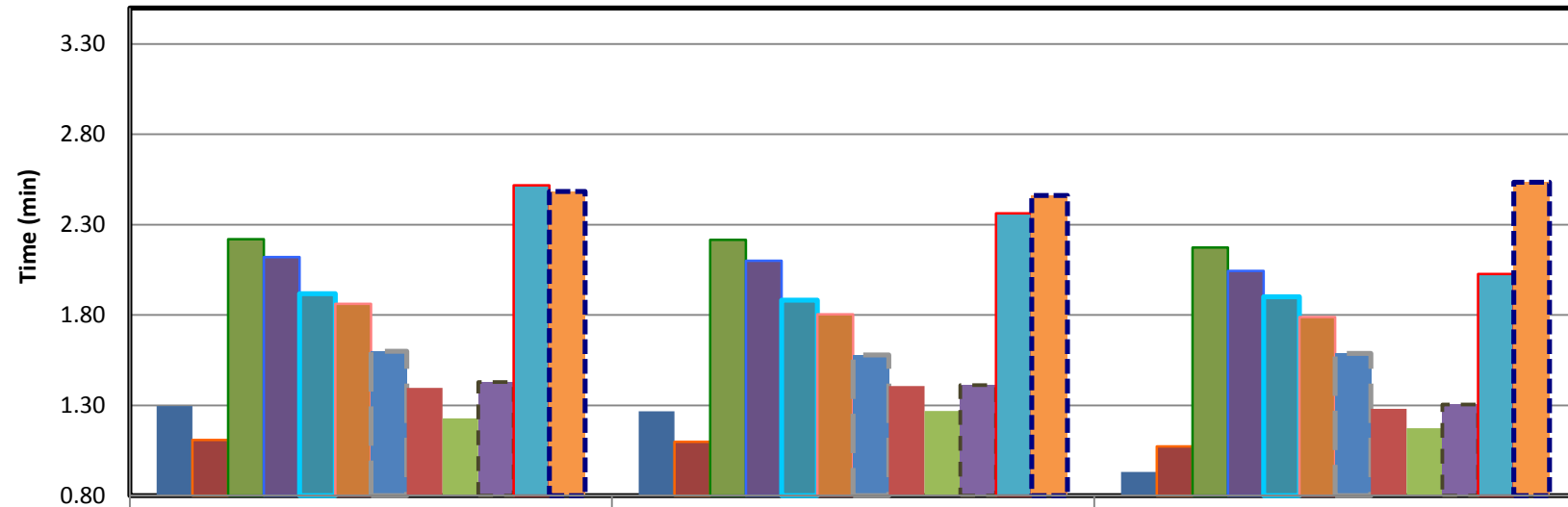
Route	Location	Travel time (minutes)				Index	
		Distance	Aug-Dec '07	Jul-Sept '07	Jul-Sept '09	Jul-Sept '09/	
						Aug-Dec '07	Jul-Sept '07
I-44 EB	East of I-270	1.07	1.30	1.27	0.93	0.719	0.735
I-44 WB	East of I-270	1.07	1.11	1.10	1.07	0.968	0.977
I-44 EB	West of Mississippi Ave	2.89	3.02	3.02	2.88	0.952	0.952
I-44 WB	West of Mississippi Ave	2.89	2.96	2.89	2.98	1.010	1.032
I-55 SB	South of Union Rd	2.07	2.22	2.22	2.17	0.979	0.981
I-55 NB	South of Union Rd	2.07	2.12	2.10	2.04	0.964	0.973
I-55 SB	South of Broadway	3.87	3.75	3.73	3.71	0.989	0.993
I-55 NB	South of Broadway	3.87	3.83	3.66	3.70	0.965	1.011
I-170 NB	North of Page Ave	1.96	1.92	1.88	1.90	0.991	1.010
I-170 SB	North of Page Ave	1.96	1.86	1.80	1.79	0.961	0.991
MO370 EB	West of Taussig Ave	1.51	1.60	1.58	1.59	0.993	1.005
MO370 WB	West of Taussig Ave	1.51	1.40	1.41	1.28	0.918	0.911
I-70 EB	East of Airfield Dr	1.33	1.23	1.27	1.17	0.956	0.926
I-70 WB	East of Airfield Dr	1.33	1.43	1.41	1.30	0.913	0.924
I-70 EB	East of Adelaide	4.37	4.32	4.22	3.63	0.840	0.860
I-70 WB	East of Adelaide	4.37	4.72	4.66	5.15	1.091	1.107
I-270 NB	At Ladue	2.33	2.52	2.36	2.03	0.805	0.858
I-270 SB	At Ladue	2.33	2.48	2.46	2.54	1.021	1.030

Average Daily Traffic (ADT)





Travel Time along Selected Sections

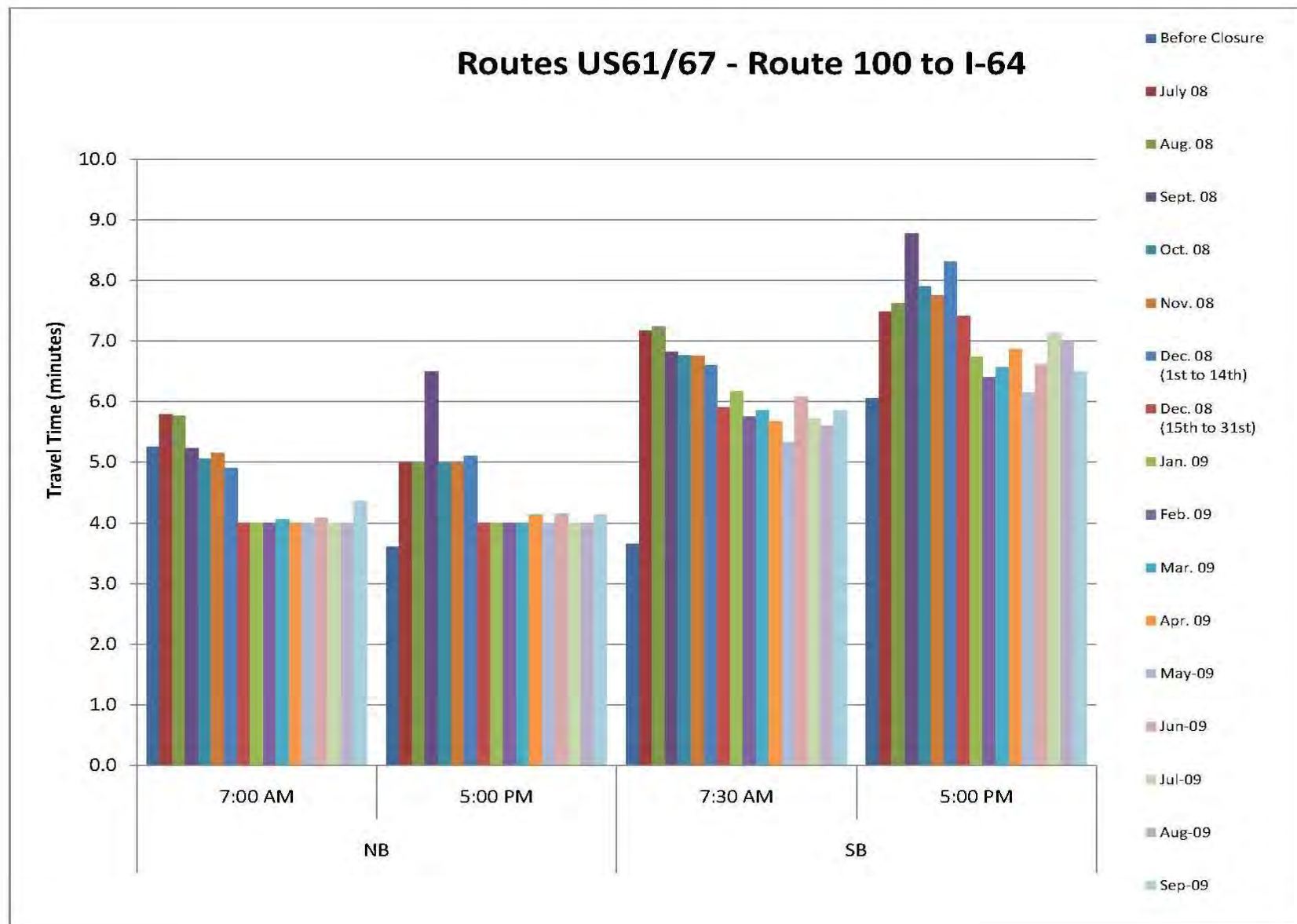


	Aug-Dec '07	Jul-Sept '07	Jul-Sept '09
I-44 EB	1.30	1.27	0.93
I-44 WB	1.11	1.10	1.07
I-55 SB	2.22	2.22	2.17
I-55 NB	2.12	2.10	2.04
I-170 NB	1.92	1.88	1.90
I-170 SB	1.86	1.80	1.79
MO370 EB	1.60	1.58	1.59
MO370 WB	1.40	1.41	1.28
I-70 EB	1.23	1.27	1.17
I-70 WB	1.43	1.41	1.30
I-270 NB	2.52	2.36	2.03
I-270 SB	2.48	2.46	2.54

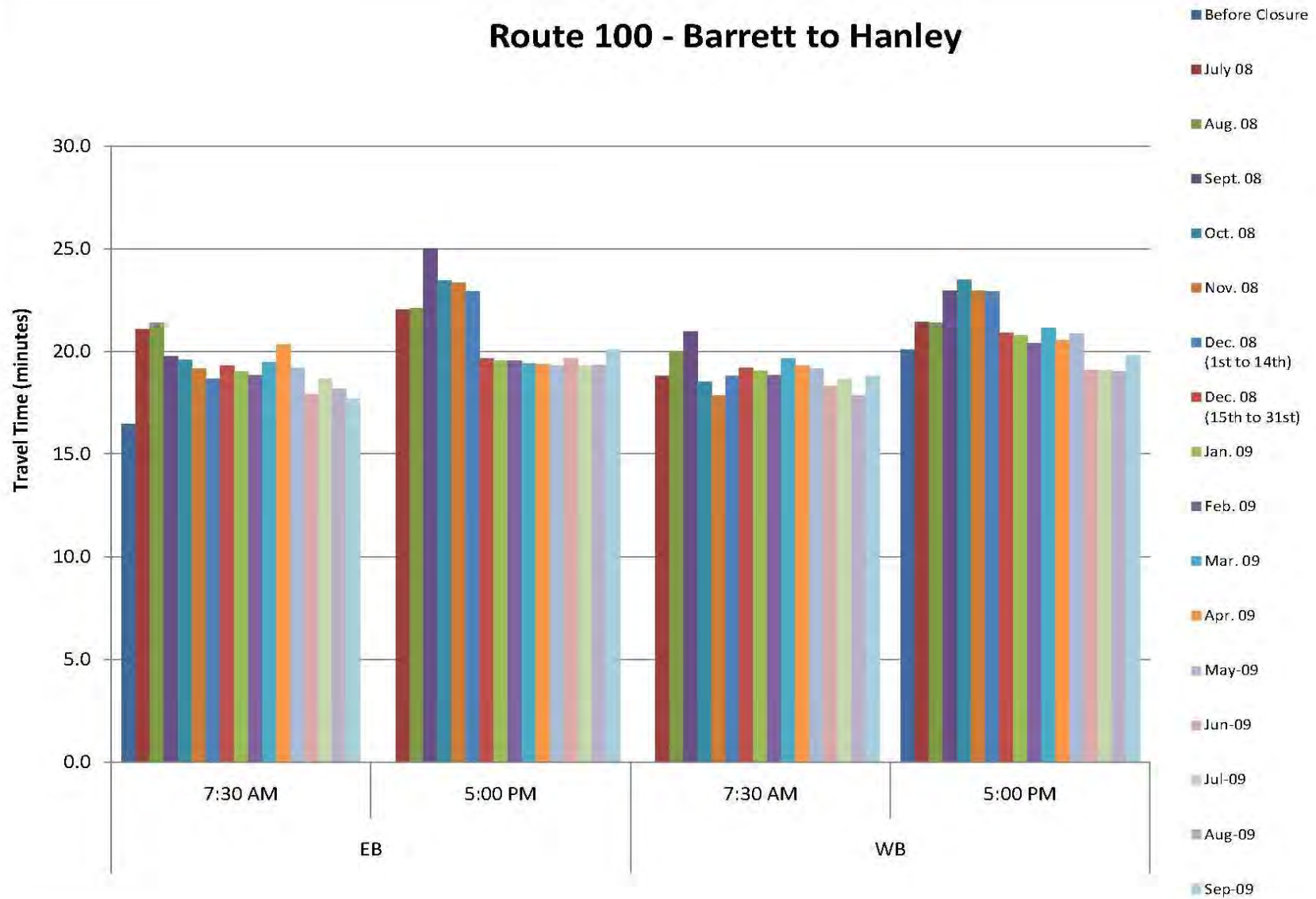
Arterials

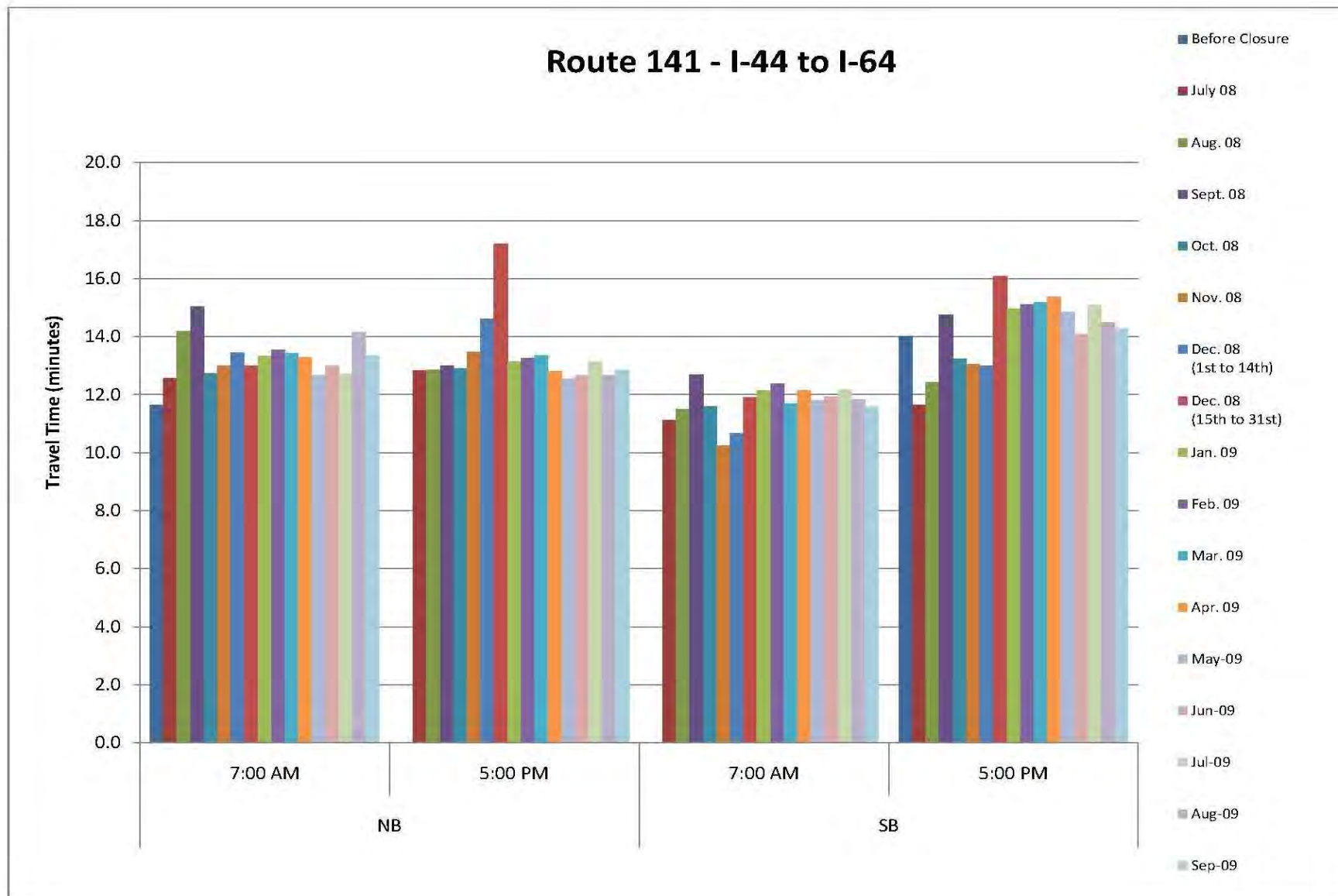
The study team continued to notice a slight increase in travel times along the two corridors being monitored during weekday peak periods. These corridors are major arterials and should provide an indicator of travel along the arterials near the I-64 construction project. The following is a table with average weekday peak periods travel times and their corresponding graphs:

Route	Segment	Direction	Peak Period	Travel Time (Min)																
				Before Closure	July 08	Aug. 08	Sept. 08	Oct. 08	Nov. 08	Dec. 08 (1-14)	Dec. 08 (15-31)	Jan. 09	Feb. 09	Mar. 09	Apr. 09	May-09	Jun-09	Jul-09	Aug-09	Sep-09
US 61/67	100 to I-64	NB	7:00 AM	5.3	5.8	5.8	5.2	5.1	5.2	4.9	4.0	4.0	4.0	4.1	4.0	4.0	4.1	4.0	4.0	4.4
			5:00 PM	3.6	5.0	5.0	6.5	5.0	5.0	5.1	4.0	4.0	4.0	4.0	4.1	4.0	4.2	4.0	4.0	4.1
		SB	7:30 AM	3.7	7.2	7.2	6.8	6.8	6.8	6.6	5.9	6.2	5.8	5.9	5.7	5.3	6.1	5.7	5.6	5.9
			5:00 PM	6.1	7.5	7.6	8.8	7.9	7.8	8.3	7.4	6.7	6.4	6.6	6.9	6.1	6.6	7.1	7.0	6.5
100	Barrett to Hanely	EB	7:30 AM	16.5	21.1	21.4	19.8	19.6	19.2	18.7	19.3	19.0	18.9	19.5	20.3	19.2	17.9	18.6	18.2	17.7
			5:00 PM	–	22.0	22.1	25.0	23.4	23.4	22.9	19.7	19.5	19.6	19.4	19.4	19.3	19.7	19.3	19.3	20.1
		WB	7:30 AM	–	18.8	20.0	21.0	18.5	17.9	18.8	19.2	19.0	18.9	19.6	19.3	19.1	18.3	18.6	17.8	18.8
			5:00 PM	20.1	21.4	21.4	23.0	23.5	23.0	22.9	20.9	20.8	20.4	21.2	20.5	20.9	19.1	19.1	19.0	19.8
MO141	I-44 to I-64	NB	7:00 AM	11.7	12.6	14.2	15.0	12.7	13.0	13.4	13.0	13.3	13.6	13.4	13.3	12.7	13.0	12.7	14.2	13.4
			5:00 PM	–	12.8	12.9	13.0	12.9	13.5	14.6	17.2	13.1	13.3	13.4	12.8	12.6	12.7	13.1	12.7	12.9
		SB	7:00 AM	–	11.1	11.5	12.7	11.6	10.3	10.7	11.9	12.1	12.4	11.7	12.1	11.8	11.9	12.2	11.8	11.6
			5:00 PM	14.0	11.7	12.4	14.8	13.2	13.1	13.0	16.1	15.0	15.1	15.2	15.4	14.9	14.1	15.1	14.5	14.3
D (Page)	I-270 to I-170	EB	7:30 AM	9.8	9.1	10.1	7.6	8.2	8.1	8.4	8.3	7.9	7.9	7.6	7.6	7.7	8.3	9.5	8.0	8.4
			5:00 PM	–	8.7	10.1	9.3	8.9	9.3	8.8	9.4	9.0	9.0	8.6	9.6	9.3	8.8	8.7	9.0	8.9
		WB	7:30 AM	–	11.3	11.7	8.6	7.6	7.9	7.8	7.4	7.2	7.0	7.0	9.0	8.9	8.8	9.3	8.5	8.6
			5:00 PM	10.6	11.2	11.6	8.5	8.7	8.4	8.9	9.3	8.0	7.9	8.0	9.2	9.7	9.7	9.9	11.4	9.6
D (Page)	I-170 to Grand Ave.	EB	7:30 AM	–									17.0	17.2	17.9	17.9	17.9	18.3	18.8	18.4
			5:00 PM	–									19.4	19.4	20.1	19.6	20.0	19.9	17.0	18.9
		WB	7:30 AM	–										20.8	20.0	19.5	20.5	20.0	19.4	20.6
			5:00 PM	–										19.1	18.5	19.0	18.4	18.2	18.3	18.7

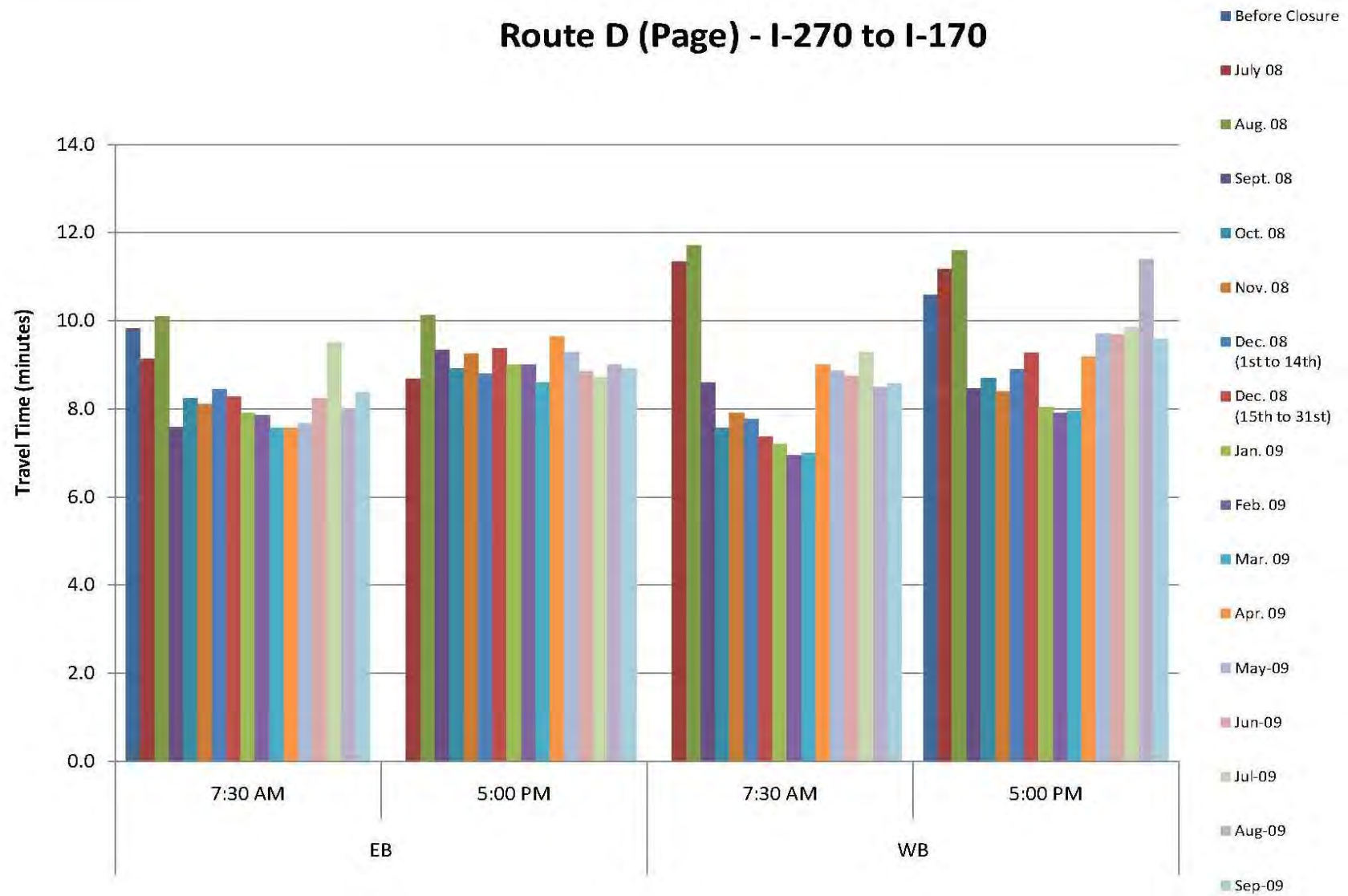


Route 100 - Barrett to Hanley

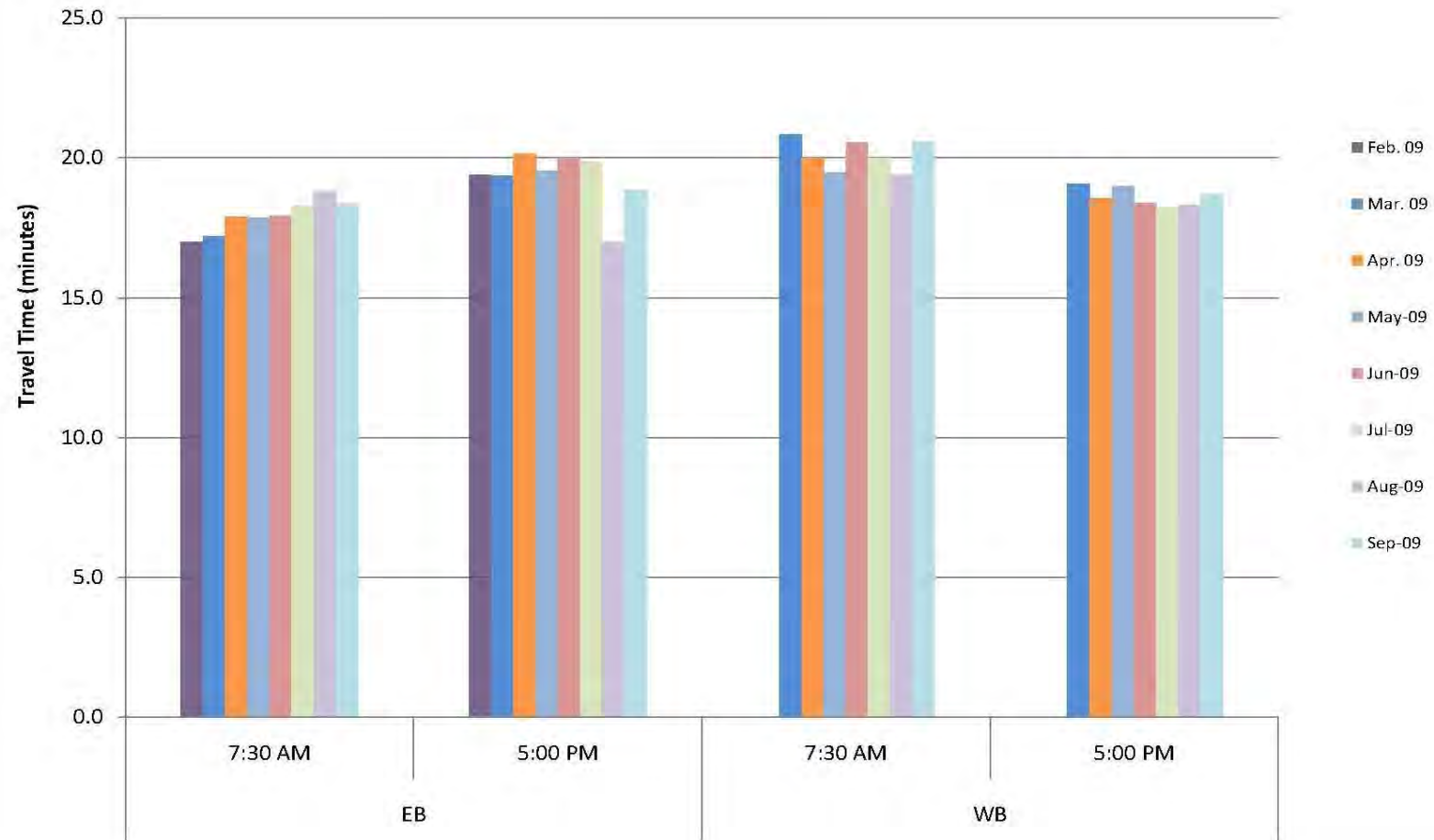




Route D (Page) - I-270 to I-170

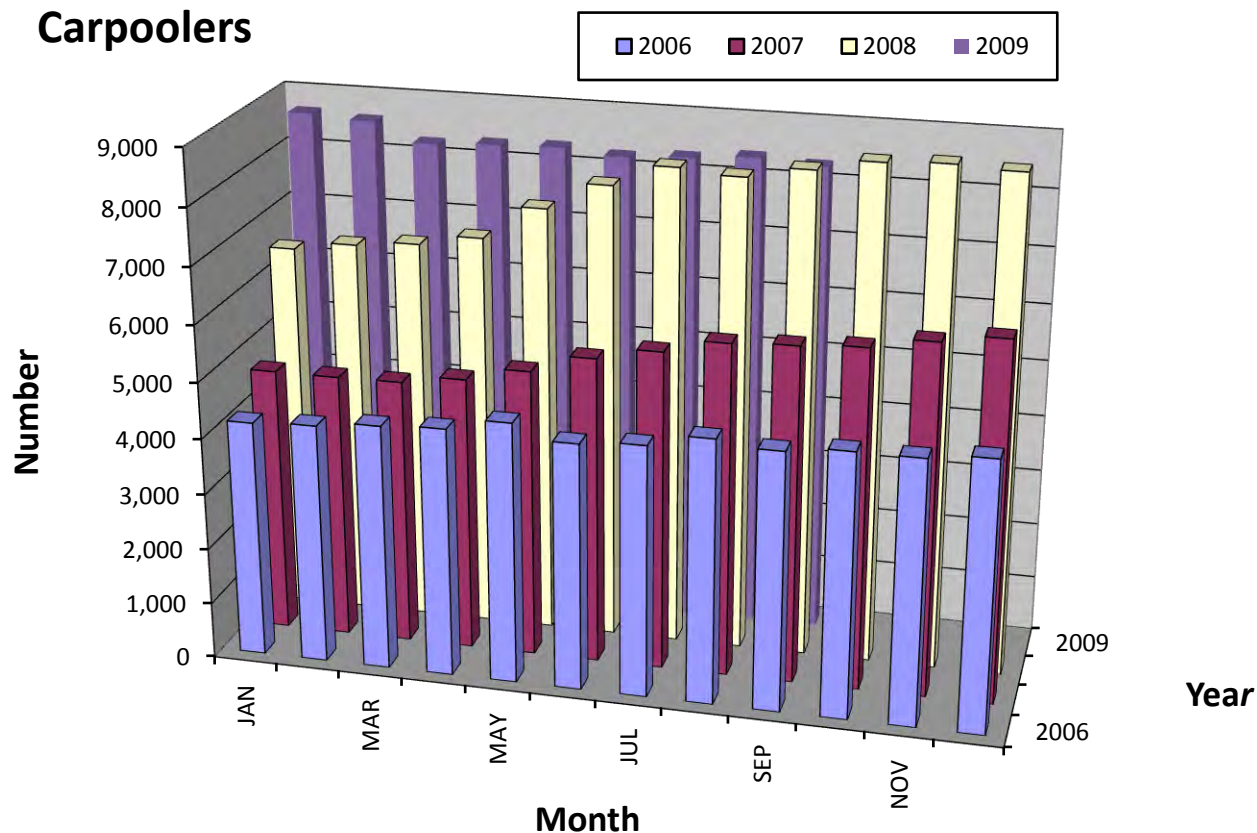


Route D (Page) - I-170 to Grand

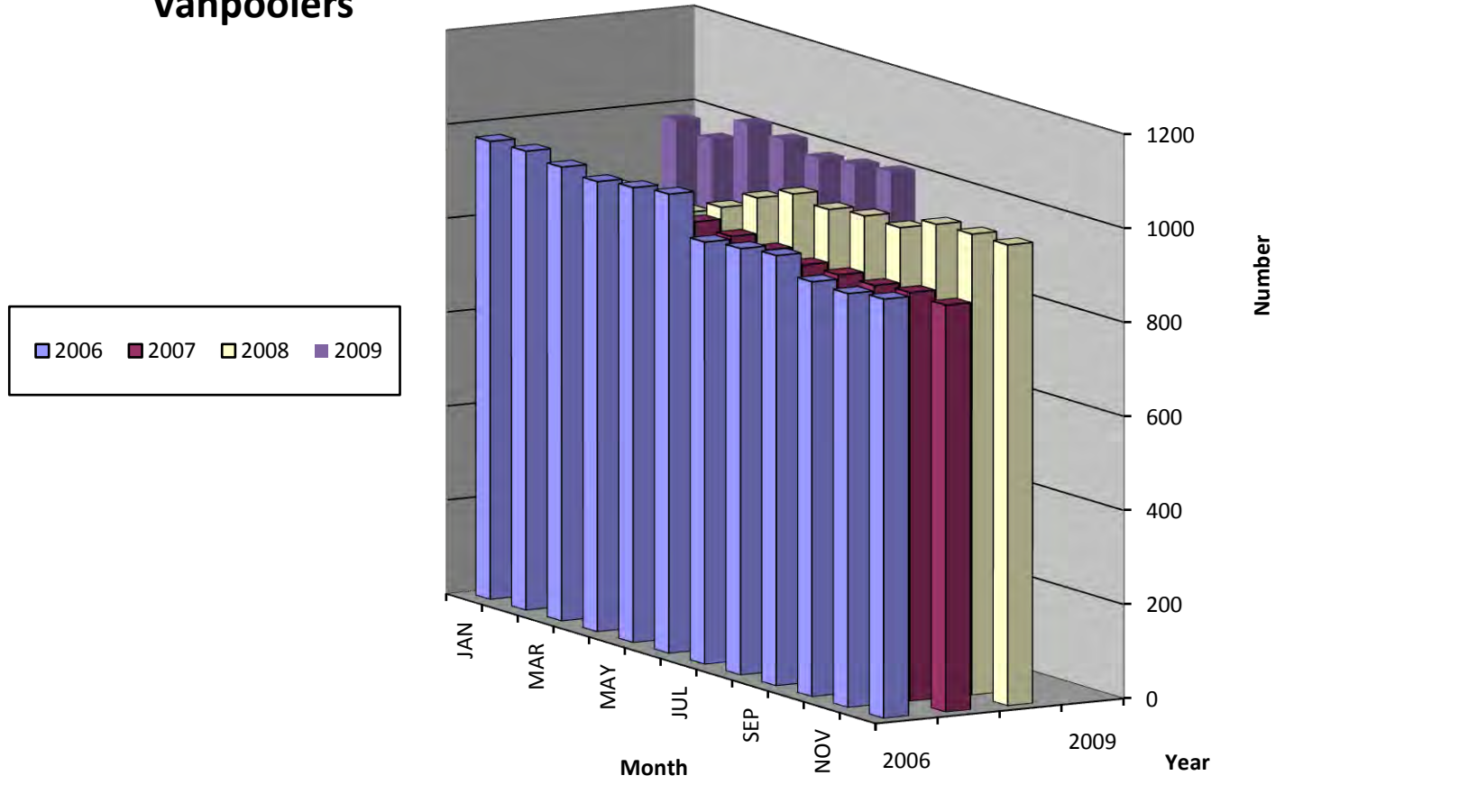


Rideshare

Regional utilization information from Rideshare shows a somewhat stable pattern for both carpooling and vanpooling during this quarter. Carpooling in 2008 and 2009 continues to show a significant increase over base years of 2006 and 2007. Vanpooling has fluctuated over the 3 plus years of evaluation with a low 843 vanpoolers in 2008 and a high of 1018 in 2009. The usage of these regional services can be related to several factors including major roadway construction, economy and higher gas prices. As the study team moves towards the final report, we will use this information along public survey, economic and other mobility information to assess what role it plays in improving regional mobility. The following tables provide a summary of information for carpooling and vanpooling.



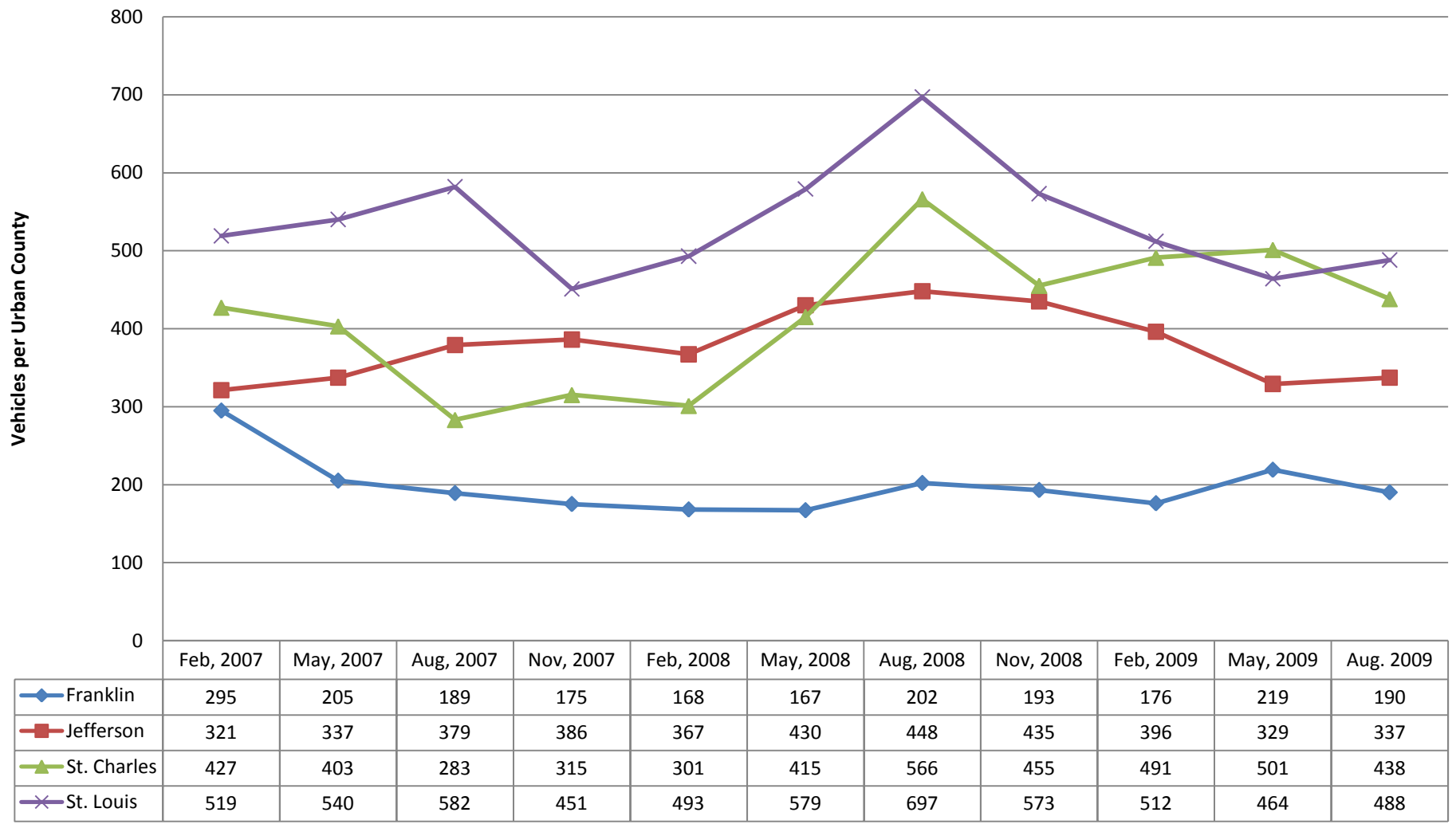
Vanpoolers



Park and Ride

Regional utilization information from MoDOT's 35 Urban Area Park and Ride lots show a peak usage in August of 2008 with declining usage trend by urban County since this peak. August 2009 is down 24% usage from the peak in August 2008 and may be attributed to lower gas prices. Factors mentioned in the Rideshare section can also apply to the changes in public use of these park and ride facilities. These factors will assess in a similar manner as the final report is developed. The following table tracks usage from the first quarter in 2007 through the present.

MoDOT Park-and-Ride Usage



4. Economics

Economics Highlights

The collection, analysis, and tracking of economic data and financial indicators was the focus of this quarter's work effort. To date, MERIC has provided HDR with economic data from the first quarter 2006 through the first quarter of 2009. In addition, taxable sales and commercial real estate data have been compiled up to and including the second-quarter of 2009. Because there is a time lag in available economic data, this quarterly report will only focus on the currently available and collected data.

Economic Analysis Progress

Current activities to date include:

- Collection of the identified and published economic, demographic, and fiscal data.
- Receipt of ZIP-code-level data from MERIC for the first quarter of 2009. The economic data includes: industry employment, wage, and establishment data tabulations.
- Analysis of first and second quarter 2009 Taxable Sales Data from Missouri Department of Revenue (DOR).
- Receipt and preliminary analysis of industrial and office real estate data from Torto Wheaton Research (TWR).

Economic Analysis

The major economic information for the I-64 corridor and non-corridor regions of St. Louis City and County for the first quarter of each year from 2006 through 2009 is displayed in Table 1. As there typically is seasonal variation throughout the year, the table below compares the first quarters of 2009. The first quarter of 2009 shows employment for the non-corridor has dipped below 2006 levels. Comparing the last quarter of 2008 with the first quarter of 2009 indicates that both regions combined experienced a loss of 28,630 jobs and \$1.9 billion in wages. The decline in employment, wages, and taxable sales has been the greatest in the non-corridor region.

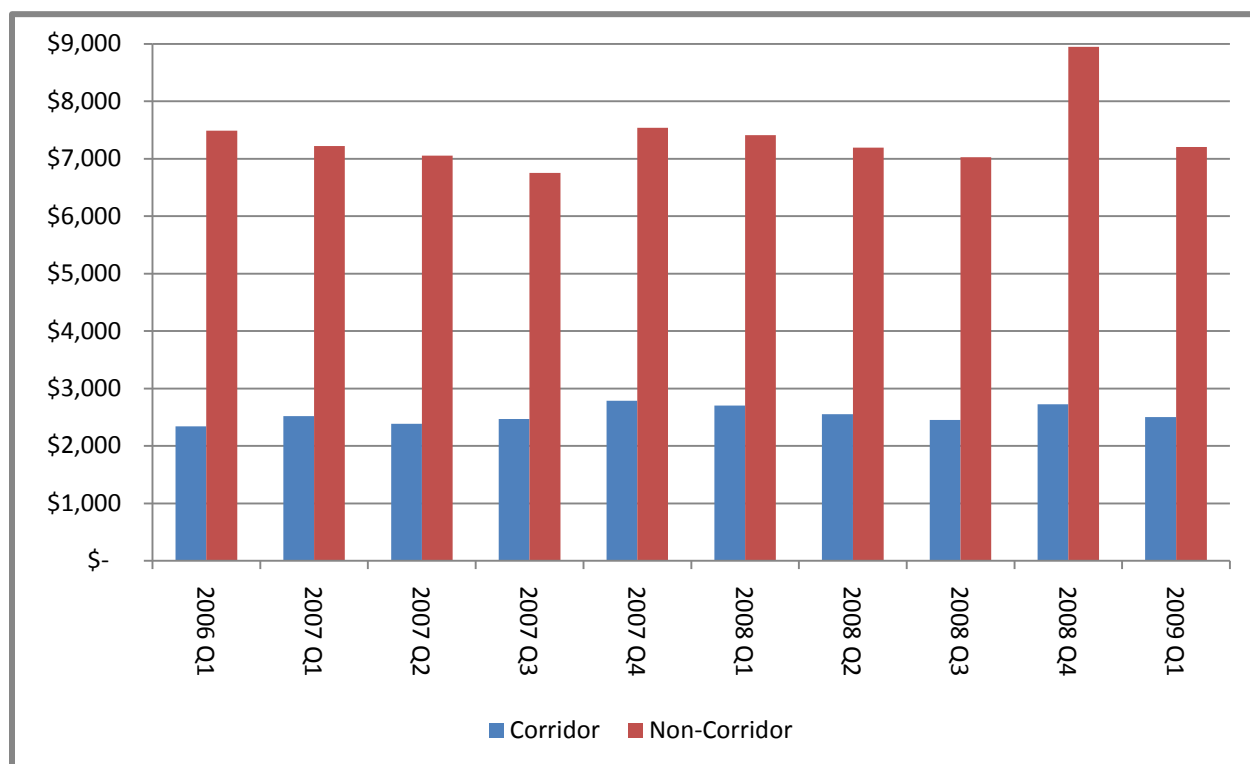
Table 1: St. Louis I-64 Corridor and Non-Corridor Economic Profile: First Quarter of Each Year

	1st Quarter 2006		1st Quarter 2007		1st Quarter 2008		1st Quarter 2009	
	Corridor	Non-Corridor	Corridor	Non-Corridor	Corridor	Non-Corridor	Corridor	Non-Corridor
Jobs	187,984	638,837	197,088	622,930	200,772	616,400	193,291	599,290
Number of Establishments	9,493	31,676	9,465	31,362	9,232	31,155	10,114	32,529
Wages (\$ Millions)	\$2,341	\$7,487	\$2,521	\$7,225	\$2,705	\$7,413	\$2,500	\$7,205
Total Taxable Sales (\$ Millions)	\$ 867	\$ 3,958	\$891	\$4,028	\$833	\$3,977	\$776	\$3,726

Source: MERIC and Missouri Department of Revenue

As displayed in Figure 1, the corridor region generates upwards of 23 percent of the total wages of the entire region, totaling \$2.7 billion in the fourth quarter of 2008, dropping to \$2.5 billion in the first quarter of 2009. The much larger non-corridor region generated \$8.9 billion in wages in the fourth quarter of 2008, but has since declined to \$7.2 billion in the first quarter of 2009. These dips are consistent with seasonal trends in the wage data for the previous years, where the wages declined from the first quarter through the third quarter of the year and then recovered in the fourth quarter. However, wages have declined below 2006 levels for the non-corridor and are barely above 2006 wages for the corridor. Fourth quarter wages (2008) were atypical, as there was a significant one time payout of additional compensation in the form of year-end bonuses, profit-sharing, severance pay, and firm buyout payments.

Figure 1: Total Quarterly Wages by Region in Millions of dollars¹



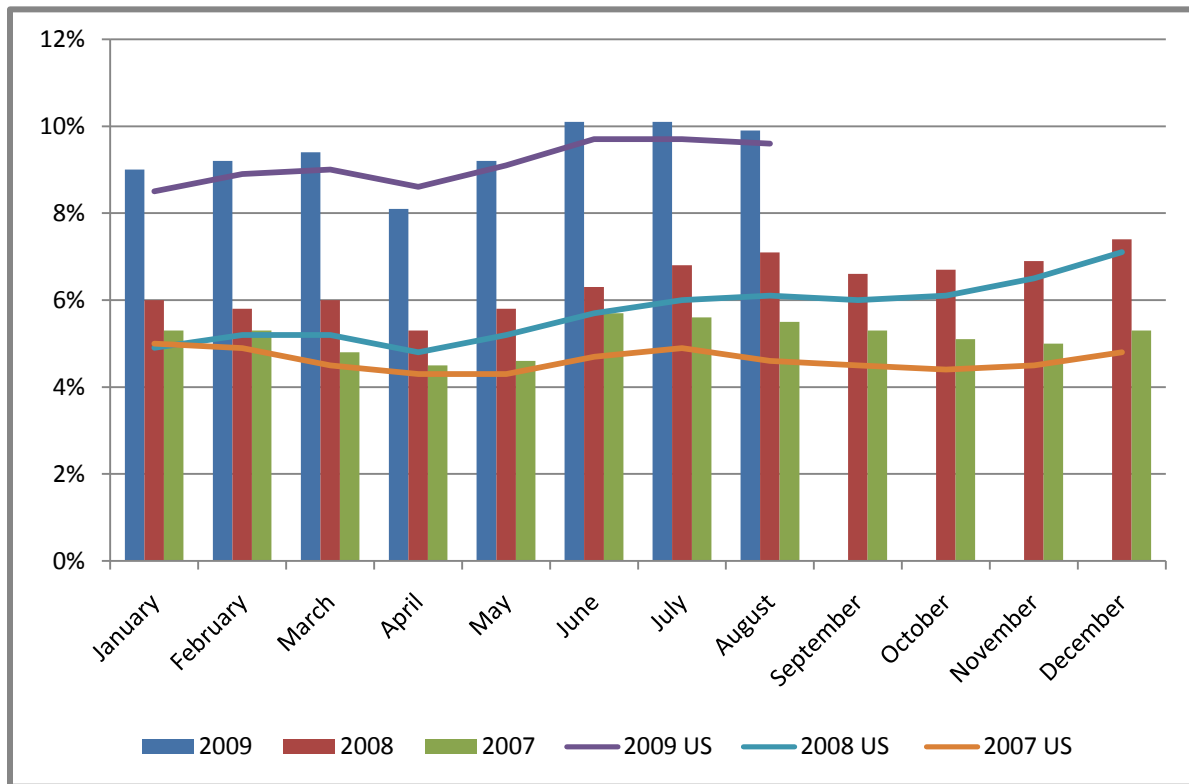
Source: MERIC QCEW

Unemployment

The total employment for the study area is 792,581 of which 24 percent is concentrated in the corridor region. Traditionally, employment trends for the region show a dip in employment in the first quarter, a small recovery in the second quarter followed by a small contraction in the 3rd quarter, and a rebound in the fourth quarter. Throughout 2008, employment levels followed the overall seasonal trends with the exception of the fourth quarter. Despite employment growth in the corridor region, the losses in the non-corridor region resulted in a 0.8 percent decline in overall employment. The decline in employment continued into the first quarter of 2009 for the non-corridor. Figure 2 shows the monthly unemployment trends for the St. Louis, Missouri, metropolitan area for 2007 through August of 2009. The seasonal unemployment trends hold for each year; however, after June of 2007 the unemployment rates are greater compared to the previous year. This steady rise in unemployment has been consistent with national unemployment as reflected in the bars by year shown in the figure.

¹ Data provided only includes first quarter of 2006

Figure 2: Unemployment Rate: St. Louis, MO Metropolitan Area



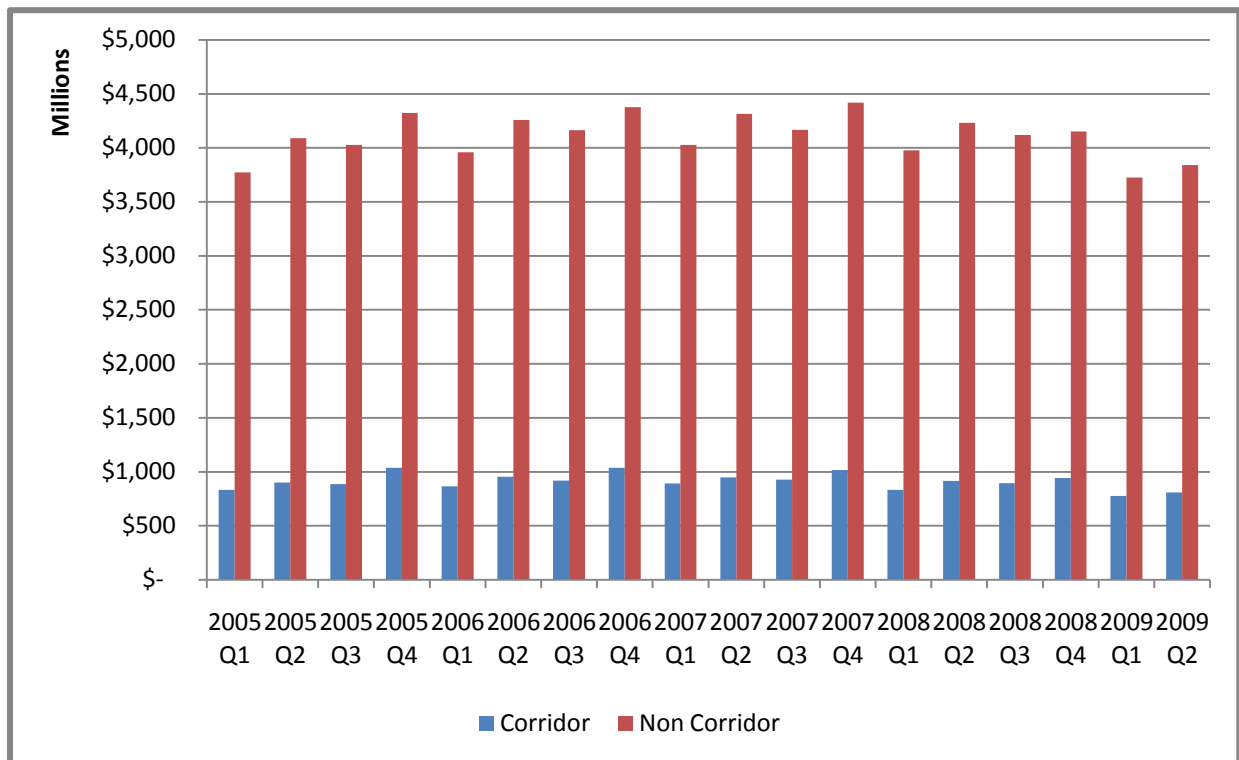
Source: MERIC

Taxable Sales

The combined taxable sales for the City and County of St. Louis were \$5.1 billion for the fourth quarter of 2008, and analysis of the first quarter 2009 shows total taxable sales dropping to a combined total of \$4.5 billion. When compared on a year-by-year basis, the first quarter 2009 taxable sales revenues dropped \$349 million dollars from the first quarter of 2008. However, the second quarter of 2009 has shown positive growth, with an additional \$150 million in taxable sales over the first quarter of 2009. It still falls short of the 2008 quarter 2 sales, however.

The graph below shows the total taxable sales for each quarter, from first quarter 2005 to second quarter 2009, in millions of dollars. As Figure 3 indicates, the taxable sales for the non-corridor are roughly four times larger than the taxable sales for the corridor region.

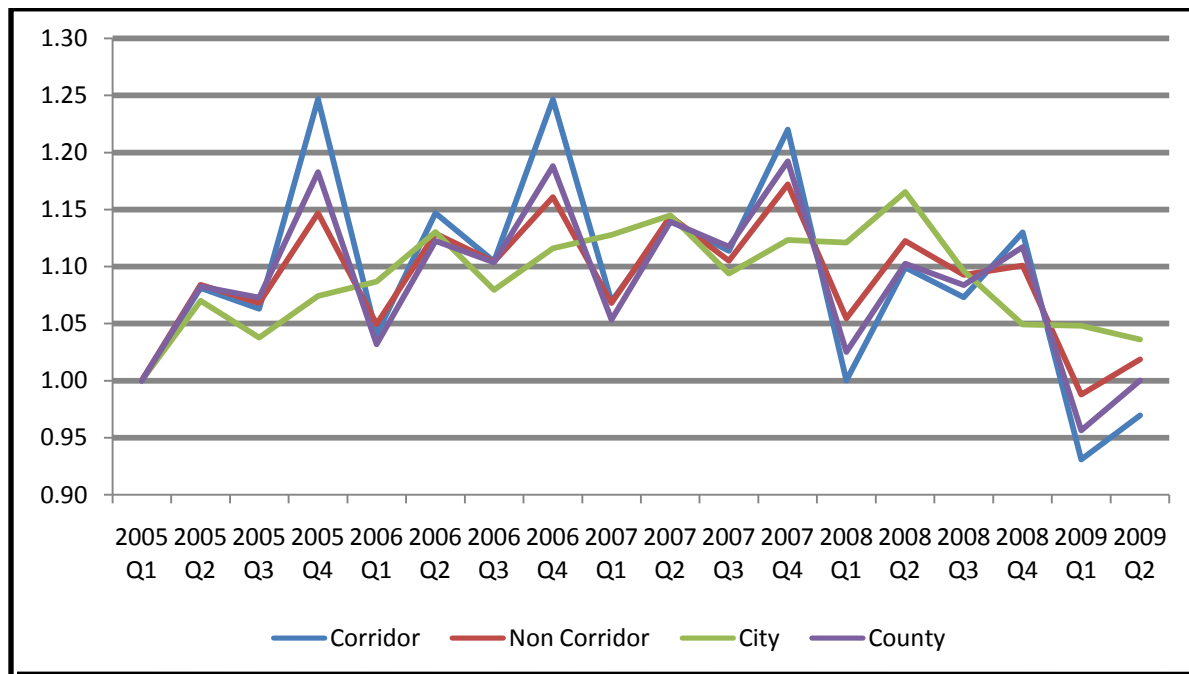
Figure 3: Taxable Sales by Region



Source: Department of Revenue

The seasonal taxable sales patterns are best seen in the taxable sales growth index in Figure 4. The index demonstrates quarterly taxable sales growth by region in the study area using the first quarter of 2005 as the baseline indicator. When quarters have a number greater than one, it shows an increase when compared to the first quarter of 2005. When quarters have a numbers less than one, it shows a decrease when compared to the first quarter of 2005. Each year, sales follow a quarterly cycle where the lowest sales take place in the first quarter of the calendar year, the second and third quarter show some degree of recovery, and then the final quarter of the year has the largest sales, which are traditionally boosted by holiday spending. The overall growth for all regions followed a similar pattern, maintaining a consistent level of positive growth until 2007, where the fourth quarter 2007 growth fell short of the previous years, and was followed by a significant drop in taxable sales in first quarter 2008. Although sales did recover over the course of 2008, they remained below 2006 levels; with the exception of the City of St. Louis in the second quarter 2008. Taxable sales dipped for the first portion of 2009 below 2005 levels, but since have shown positive growth.

Figure 4: Taxable Sales Growth Index by Region



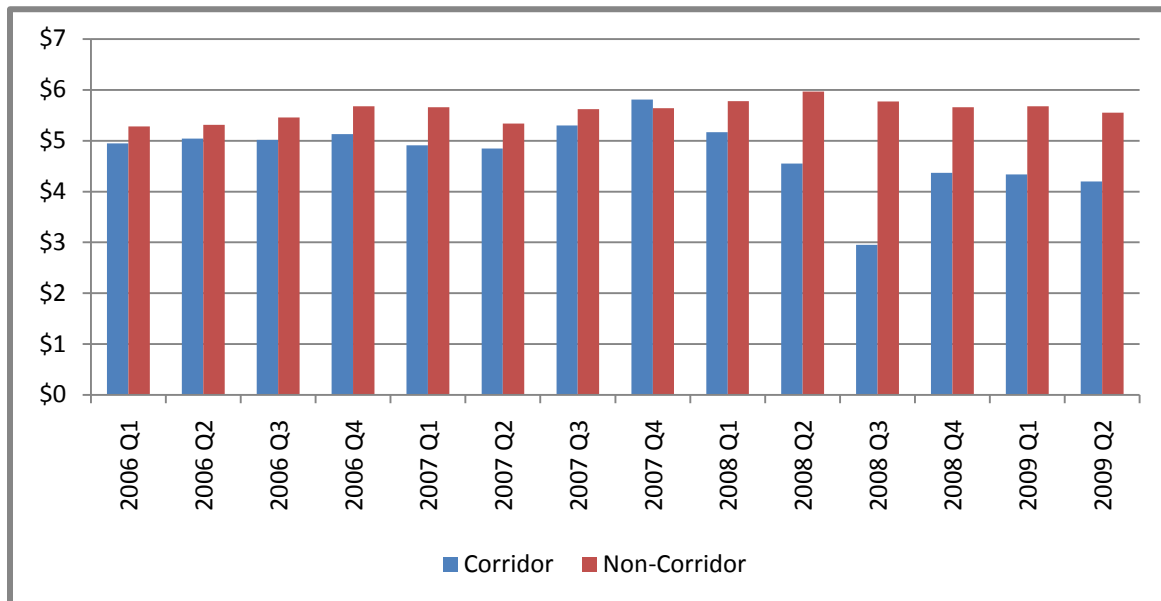
Source: Department of Revenue

Real Estate

TWR created a custom real estate database for the corridor and non-corridor regions, as well as the St. Louis metropolitan area. The data, based at the ZIP code level, provides vacancy rates, net and gross asking rent prices, the number of buildings, total stock, completions, net absorption, and availability rates for industrial and office real estate. Since the St. Louis metropolitan real estate market rates are mostly quoted in gross terms, over 95% for vacant office space, this analysis will focus on gross asking rates.

The TWR industrial data for gross asking price per square foot shows the gross asking price for industrial space peaked in the first half of 2008 for the non-corridor, whereas the corridor peaked in the last quarter of 2007, as shown in Figure 5. Industrial stock has not grown in the corridor area since the beginning of 2007, while the non-corridor region is showing a steady annual growth of 0.8% since 2000. In terms of total industrial stock, the non-corridor region has over 6.5 times the amount of industrial stock found in the corridor region. The figure also shows that prior to the second quarter of 2008, gross asking rents between both regions were within \$0.75 per square foot for industrial space, but following the second quarter of 2008 rates between the two regions widened to a difference of at least \$1.29 per square foot. The variation in prices for the corridor region in 2008 and the first half of 2009 is an indication of greater vacancies that are likely related to the economic downturn.

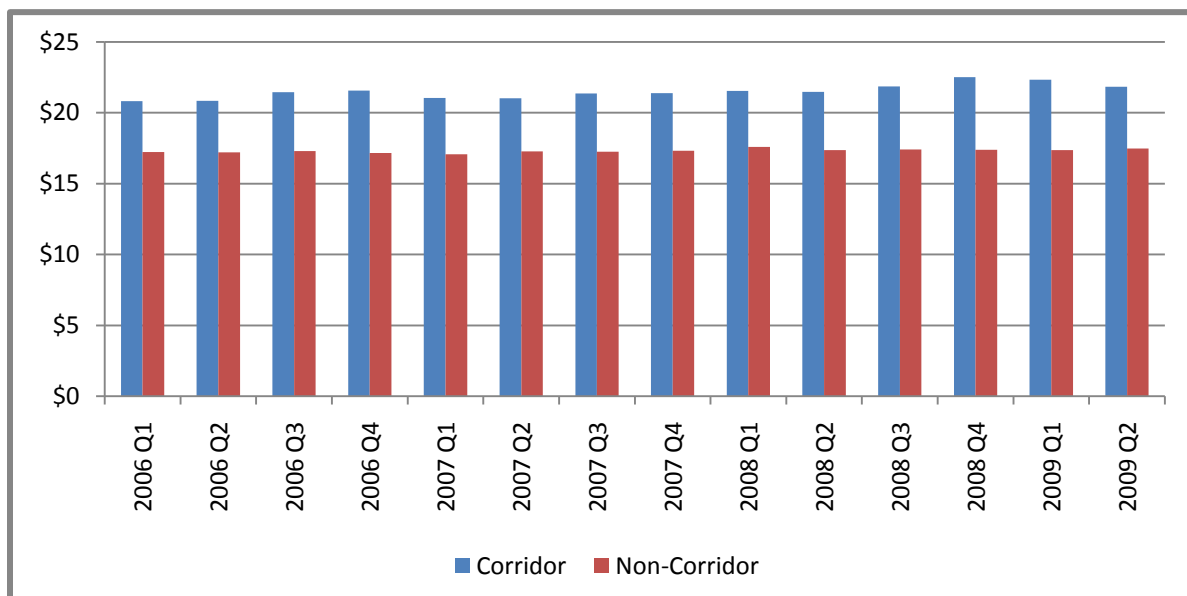
Figure 5: Gross Industrial Asking Rent per square foot



Source: TWR

While the non-corridor region has been established as the leading industrial real estate market, the corridor region is better suited for office real estate. Although the non-corridor region has an additional 10 million square feet of office space, the corridor region has higher asking rents and lower vacancy rates. The gross asking price for office space per square foot for the corridor has shown positive growth through most of 2008, with a slight dip in the second quarter of 2009, whereas the non-corridor office asking rent prices have remained relatively flat with limited variation in asking rents as illustrated in Figure 6.

Figure 6: Gross Office Asking Rent per square foot



Source: TWR

In terms of office vacancies, the lowest office vacancy rates for both regions occurred during the middle of 2008, but began to rise at the end of 2008 through the second quarter of 2009. Since 2007, the corridor region's vacancy rate has been on average 7.7 percentage-points lower than the non-corridor region, as seen in Figure 7. The lower gross asking rents for office space are likely impacting the overall vacancy rates within both regions as they have not gone above first quarter 2006 levels.

Figure 7: Quarterly Office Space Vacancy Rates by Region



Source: TWR

Conclusions and Future Steps

Thus far it is difficult to isolate the impacts of I-64 on the St. Louis economy from the larger national economic conditions. Additional analysis of the 2009 economic and fiscal data will help assess the implications of the I-64 closure and the overall economic health of the region.

The assessment of economic cost attributable to changes in traffic, travel delay, and vehicle miles traveled (VMT) due to the western closure of I-64 will begin as additional data becomes available. The data and analysis in subsequent quarters will provide a better understanding of the magnitude of the transportation costs and their impact on productivity and competitiveness. Further analysis will offer insight on the project's effect on retail sales, customers and visitors, particularly among Corridor businesses. Finally, it will help to ascertain the extent to which national economic conditions are influencing the results.

Appendix A: Communications Data

- Online Survey Summary
- Online Responses

Summary of Online Comments to Eastern Closure

Version FY10Q1

October 13, 2009

Respondents were given multiple opportunities to provide comments in the online survey. Each opportunity corresponded to a different part of the survey.

The comments in black were previously released in previous supplements. [The comments in blue are the most recent comments](#). They have been received since the last report was generated.

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Impact of Closure Comments

The following comments were left in response to the statement *If you want to provide more details about how the closure has affected you, please do so here.* The comments are presented as they were received.

I don't understand why the Big Bend overpass was closed before the Hanley overpass was re-opened. This has caused a MAJOR upset in my morning commute!

living at Hanley Rd in Clayton, I have been hit by both closures - - especially the closure of the Hanley Rd overpass and the failure to open it before closing Big Bend - - I feel trapped north of forty!

The impediments to North-South traffic has affected me more that the closure of I-64.

I work in Clayton and live in South County. I've been able to find alternative routes through the various closings..... until now..... I am very aggravated with both Hanley and Big Bend are closed at the same time. It is one thing to increase your commute 10-15 minutes, but now it is VERY frustrating to make your way through all the closures.... (ie. No right turn on Boland, lane closures on Brentwood by Crate n Barrel). Who ever decided to close 2 major overpasses within the same vicinity at the same time, was not thinking about the community. St. Louisians have been VERY patient through all the Hwy 64/40 construction. I don't feel MODOT is being very considerate of the communities or the drivers who deal with the struggle everyday.

Since MODOT was stupid in closing Hanley and Big Bend at the same time, and closing Boland and other side streets that take you across I64, what took me 15-20 minutes to get home, took me 1.25 hours last night. If the drivers are being inconvenienced why shouldn't the neighborhoods as well? These are public streets that my tax dollars pay for I should be allowed to use them. VERY POOR PLANNING!!!!!!!!

It has made my morning commute BETTER, but made my evening commute WORSE.

I avoid try to avoid Forest Park Parkway in both directions from 4 pm to 7 pm because it is a nightmare!

Forest Park Parkway is easy to travel at 7:10 am. Gets a lot busier at 7:20

It has made getting to/from work miserable and I can't wait for the thing to be finished.

The opening of the western half has made my commute much easier... I live in Creve Coeur and work in Maplewood.

I think the planning was very poor in closing both bridges at the same time.

What used to be a 20 minute commute (with traffic) has now at least doubled since you have decided to concurrently close the Hanley and Big Bend overpasses.

The first half was bearable. The second half? Awful! I live in sw city, son in daycare at brentwood and Strassner, I work at hanley and Forsyth in Clayton. It takes me 45 min to get to work and sometimes as long as 1.5 hours to get home! It has taken me an hour or more to get from Forsyth and Hanly to 40 and Brentwood on several occasions. Then Richmond Heights made Boland one way from Clayton!!! Myself and several others have stopped doing business in richmond Heights, they will no longer get sales tax from me, now or in the future.

The closure made the roads in my neighborhood very crowded during rush hour, and I fear that safety for pedestrians and bikers have been compromised. It's frustrating to see that people still drive when they could be using public transportation.

So glad you closed it down and shortened the duration. The SMART thing to do. I do not take my kids to school anymore. I go to work very early.

I travel from JB Bridge to I40 west to Chesterfield Pkway W. It seems now at I44 & 270, I just slow down, where before I40 was open we would come to a complete stop. On the way home, I travel I40 to Mason, then take the service road to Dougherty Ferry. This has save time for me. Miss most of the congestion. Truefully, I make better time now then when I40 was totally open. Leave about 6:50 am in the morning an return anywhere between 4:30 to 6:00. I hope I have as good a commute when I 40 reopens. Thanks for the improvements.

No Walls Please around Forest Park and the Zoo.

This closure has been a pathetic cruel joke...

I get stuck in traffic on Big Bend, Hanley, Mcausland and Claytonia all of the time. My Fiance lives on Claytonia and parking on her street has been affected due to rerouting traffic. The engineers involved in planning the bridge closures should have not closed Big Bend and Hanley at the same time while reopening the neighborhood bridges in Richmond Heights. The traffic through these residential neighborhoods is overwhelming and a nuisance.

I spend more time sitting at traffic lights than I do actually moving in the car. It's annoying, but I know that it won't be long until the frustration will end. It's doubled the time it takes for my 3.5 mile commute. Relatively small inconvenience.

Overall, I've been pleased how the work has been progressing. However, this week, things changed. The Hanley bridge opened and a portion of the heavily travelled Eager Road was closed. We drive this stretch of road 3 times per day. The detour by the MetroLink works okay except for the stop signs, one of which was just added. Nothing frustrates me more than to sit for 10 minutes to approach a stop sign just to see a green light at Hanley that no cars are crossing b/c they are stuck at the stop sign. The stop signs really should be removed to improve traffic flow.

The opening of Hanley and closing of Eager has been a nightmare. Up to this point, I was hardly affected by the construction at all. Now, I am working on an

Island called Meridian. An island with very dangerous traffic patterns for both pedestrians and those in vehicles. And it appears there was not much thought put in to where all of these cars would be going. Hanley over Hwy 40 prior to the construction was mainly used to get to Hwy 170 - not to get from Clayton to Manchester. Now all of that Hwy 170 traffic goes between the Metro garage and the Meridian complex - with no sidewalks for pedestrians and at first no stop signs for the East bound traffic. Someone finally put up on Stop sign and now you have a chance to get your car out of the garage - primarily if you need to go East bound. Those wanting to exit and go Westbound on Dale/Meridian are still taking quite a chance when attempting to "merge" in to traffic

I wouldn't say that the western half is FINISHED. You may have "opened" it last December, but every day there are lane closures, ramp closures, closures of the streets underneath bridges (Lindbergh). It's a mess. To say that the western half of the project was completed on time is an outright lie, and as a taxpayer, I'm offended for any penny you were given as an incentive for having completed it either ON TIME or EARLY.

This closure has got to be one of the most insensitive, worst ideas I have ever encountered. I now have to leave more than 20 or 30 minutes earlier, traffic is always congested, traffic now comes through my once quite neighborhood of Richmond Hts and threatens children in the area including my daughter with a huge amount of drivers rerouted through the area. Workers work all hours of the night with no notice...and they work directly outside my home!

When the western portion was closed, my 3-mile commute to work was 3-4 times longer!

I travel on 1-44 to work and always have. It is more dangerous and frightening to be on the road with such smaller lanes and big trucks. I can not wait to get back the wider lanes. I don't think smaller lanes and adding lanes has helped traffic at all on 1-44. I drive slower and will lane change to get out of the next lane to a big truck or I will slow down to not be driving beside a big truck.

It's made my life miserable. I used to get to work in 15 minutes, but for the past 2 years it's taken 45+. I've missed out on several after-work neighborhood activities b/c I leave work later (rather than sit in traffic), and the commute takes longer. Now it's getting dark earlier, so by the time I get home (7 pm), I feel like I've missed the whole day. When will this thing be finished?!

In addition to leaving early, sitting in traffic that is a direct result from the I-64 closure requires more gas consumption and causes higher stress.

Deeply affected one family member's work and school commute.

The Jefferson Avenue bridge reopening greatly lessened the affect of the eastern half closure, because it reestablished access to I-44. Before that, I took Hwy 40 to Hampton to get to I-44 because it was faster than trying to use the Jefferson bridge detour. Other than that, it is obvious that great planning went into these closures.

I take MetroLink to work. The closure of the Big Bend and Hanley overpasses has had the greatest effect on us.

eager road...oh my god, please help.....this is killing me

I was pissed that the website listed that Oakland and Clayton bridges would not be closed at the same time and then all of a sudden they were.

Since I am retired and no longer attend school--my schedule only impacts me as far as convenience is concerned. I live in Lake Forest Subdivision which provides a very inconvenient challenge when attempting to reach the highway going west--or stores to the south of me

Completing the Hampton bridge will make life a lot easier from the south side to midtown

I have totally shifted my route and avoid the area.

I work in the western half and now have the open I-64

It has put 40 minutes or more daily on commute times.

I have not changed it from the closing of the western side, I still have to allow extra time due to reach my destination.

My company moved from Clayton to St. Peters prior to the closing in part to avoid disruptions.

This part of the closure hardly affects me at all. The other part significantly affected me.

I think the workmen did a great job , the only thing I do not like I can't see 40 from my window at WORK .

During the eastern closure, I will be using the Forest Parkway route, as I live by the Mall at Brentwood and Eager Road. Unfortunately, Highway 44 is too far out of the way south of me to use for commute to work.

I am a Muny season ticket holder, and I'm concerned about the eastern half construction will effect my commute to the Muny from the Chesterfield area.

Takes a few minutes longer to get from HiPointe to the Richmond Heights P.O. or Sam's Club. Not that big a deal yet.

We live near 270 and Ballas and work near 40 and Kingshighway in the CWE. Before, we traveled East on Olive and took 170 South to 40 East to the CWE. Now, we plan on traveling South on Lindbergh to 40 and taking Forest Park Parkway to the Clayton Metrolink station, toward the CWE. Even though the travel time may not change, enjoying the new highway will be a treat!

I go to work later to avoid the traffic and work later to avoid the home traffic. I will also limit greatly going out with my friends in St. Charles/West county. I have rescheduled business meetings in West/North county to make them closer to my home in South City. I am also going to travel by train to KC & CHI so that I can park in the city and not drive to the airport. North STL driving at night when I am a single woman is not a smart idea with inclement weather.

today 12/16/08 they changed the time of the lights at forest park parkway and skinker and traffic on skinker was horrible. There was bumper to bumper traffic from 1/2 mile south of Wydown until you crossed the parkway. And southbound was backed up past Olive. I understand that you need to improve the traffic flow on forest park parkway, but do not cripple the north and south bound routes. What is going to happen on roads like Skinker when Hanley is closed?

At MODOT's suggestion took Page this morning (coming from St. Charles) all of the way to Kingshighway. The street was not plowed past I-170. So to get to WU I should go N on 170 and get off where? FPP is past capacity. If a road is going to be recommended as an alternate route then it should be maintained

I think MoDot attempts to spin that drivers shouldn't take the Parkway as a waste of energy. The fact is that most believe the sit time there is less than the sit time to get to all of the alternates you suggest. It will be the headache until the east side is completed. As we have all ready the county to the city is like a funnel and with the amount of business community traffic along with heavy residential there is simply no way it can't be more of a headache than the west side was.

I still have not found a safe route all the streets are closed or way out of my way of the places I need to go, it really hurt that Oakland also closed to skinker. Today was awful and had car trouble sitting in the long traffic lines. I had to cut off onto a side street and then that street didn't go thru had to turn around, ended up on big bend and tons of traffic...there was no safe clean streets to go.

Up until the eastern half closure, my job was terminated, so I no longer commute east of I-170.

The eastern closure has killed St. Louis traffic. The first few days were worse than the worst day of the western closure ever was. There is no path from East of 270 to downtown. With the western you could drive Clayton all the way down and it took less time than driving out to 270 and around to 44. Now there is just no path. There are no roads that go all the way downtown. Manchester is a joke as you cannot get by Hanley without a 20 minute delay at Hanley. Once by it you are again stuck in 2 places. Forest park parkway cannot handle the load Clayton did and is a mess. There is just no path. This brings up the question of why Clayton to Kingshighway in front of the zoo is closed. All you are going to do is repave it. This can be done with it open. 200% of your effort should be in getting this short eastern most section of phase 2 open. In fact you should open 1 lane east and west that would stay open during the entire project. This would solve your current crippling of St. Louis!!!!!! With this section closed Clayton is lost as a means to get downtown. With this open you gain 2 lanes all the way.

It is more like 40 mins earlier but you don't have an option for that.

Highway 70 traffic has been negatively impacted - the reversible lanes need to be utilized the way they were intended - eastbound in the morning and westbound in the afternoon.

Unable to shift commute times due to children's school schedule.

There are NO main thoroughfares from the south/east direction on I-64 all we have are city streets and Forest Park Parkway, which is a disaster and we were told not to take after the first day that 30% (your calculations) went that way. I have yet to spend less than 1 hour 30 minutes one way in my commute to work when it typically took 35-40 minutes. I went several ways in an effort to find the best way before the closure, and NO WAY came close to my normal travel time. MODOT stating that all is going good is far from the truth!! Why don't you survey some of the actual drivers on the road. I work with 10 others and all have the same opinion and travel time added to their day. The north/east at least had Page, Olive, Lindbergh we have city streets with tons of lights!!

I take Forest Park Parkway to I-170 in the am, I commute opposite the main flow (west bound), so not many issues except at FP Pkwy and Big Bend.

It's ridiculous that drivers are advised to change their work hours; "shift your commute time." Most employers are not that flexible or can't allow workers to change their hours. I work in the health care industry and have patients who would be negatively impacted by such a change. MODOT is so out of touch with the day to day reality of workers, it's insulting!

I'm a real estate agent, so I work at all hours, travel most roads. I have to schedule longer drive times to be sure I'm on time.

We travel from Zip 62062 to School in 63131 and then I travel to work in 63103. No matter how you slice it ... it is a bad commute everyday.

I live downtown and I am still trying to find a good route to Westport. Page is good, but I do not feel safe, especially in the evening. The number of open businesses, not counting liquor stores, is minimal, the traffic lights are not synced, and I find myself sitting at red lights with no cross traffic. Why aren't those lights flashing? Also, when using the Forest Park Parkway, there are no signs for where the next gas station is. The first half was bad, but this closure seems to be MUCH WORSE. I wonder if the spokespeople for this project really know how/where St Louisans live and work, also do they understand why Page Ave is under utilized? Mr Waelterman should take this route and see how safe he feels, and consider whether he would like his wife to take that route at 7 pm.

it seems that everywhere you go the stop lights are always red, and the people who don't go the speed limit in the left hand lane block the road. (they are usually on the phone)

I feel it was a poor choice to close Oakland at the same time that the highway closed. Surely, this could have stayed open until the highway was back up and functioning. This only caused more headaches and travel problems. I do not feel this project was well planned at all.

Although we live in the county, we did a lot downtown. The only things we do now are things we have to do for the kids--Upper limits, but other than that, we're avoiding it. The biggest impact has been McKnight Rd. It has always been congested going North getting to highway 40, but now is worse than ever. There is a stop sign at a neighborhood right before you get to the highway that

seems to really slow things down. For the last few days it has been backed up well past Litzinger. It's unfortunate because I just need to get to the interbelt and I was really looking forward to getting to it from McKnight.

I can now travel on the new section of 40 to get to work instead of up and down Clayton Road.

The closure may affect my social life to a degree, but I know it's temporary. Keep up the good work

I have always taken I-70 to commute to work. Traffic on 70 did not seem to be effected in the first closure, but the recent closure has effected traffic. I have a hard time understanding why the express lanes are not opened eastbound on 70 in the mornings and westbound in the evenings?

you have cut out all my "short cuts" and "secret ways", i.e. oakland to mackland to weise (thank you!!!!!!!). It is very difficult to get about, and just recently you stopped people being able to travel both ways on Berthold! I am still able to get to the areas I need to go to or want to go to, but what would take approximately 10-15 minutes, is now taking 1/2 hour to an hour.

vist the area 2 times a month. difficult finding routes when not entirely familiar with area. Would like to see a mapquest type program to assist.

I now do not leave my house until 8:15 to 8:30 becausue of the tie ups on southbound I-170

Because I travel North in the morning and cross I 64 somewhere between Big Bend and Hampton, I must route around the street closures. Not a real big deal until Hanley AND Big bend close at the same time.

I now have to leave about 30-45 minutes earlier than before. Now that the second half of 40 has shut down, things are EVEN WORSE than 2008. Did anyone think this project all the way through? Also - Why did you stop showing the accident stats in your Quarterly Reports? The only reason I can imagine is that accidents are WAY up since the closure. You can't restripe lanes, making them too narrow, then re-route thousands of cars and semi's, and not expect an increase in accidents. Why is no one tracking the personal stress factor? Does it not matter to MODOT?

Having to leave 2 hours earlier & getting home 2-3 hours latter because of the closure is insane. IT SHOULD HAVE NEVER BEEN DONE!!!!!!!!!!!!!!

backup on southbound 170 exiting at Hanley is bad, even hazardous. Need to adjust the light at Hanley to let more traffic exit the highway. Not sure why this has recently gotten so bad unless they changed some signals as it hasn't been that bad since the first week of the 40 flip. It shouldn't take 20 minutes to get from Forest Park exit to Hanley. I have tried leaving work earlier (as much as an hour), same problem.

ACCESS TO HWY 40 WEST OF I-170 IS IMPOSSIBLE BECAUSE MCKNIGHT AND BRENTWOOD TRAFFIC TO THE HIGHWAY IS BACKED UP AT RUSH. THE TRAFFIC LIGHTS DO NOT SEEM CAPABLE OF FLOWING TRAFFIC

EFFICIENTLY. THEREFORE, I STAY MORE ON SIDE ROADS AS IF THE HIGHWAY IS STILL UNDER CONSTRUCTION.

I travel to and from work from the Metro East (O'Fallon, Illinois) to Chesterfield, Missouri and travel either 255/270 or 44 which adds around 10 extra miles to my commute and an extra 20-30 minutes commute time and more money in gas.

I must now take manchester to hanley to 170

The closure of the road negatively impacted the amount of business done at my job, and I had been laid off because of it.

This project has been a real pain. MODot is the most incompet branch of this state government.

I don't need the freeway to commute to work, thankfully.

I can get onto 170 Northbound much more quickly! Takes me a little longer to get to the west end areas

The closure has only prevented me from visiting a restaurants during my lunch breaks that are slightly far from downtown.

I have relegated to the expressway and the intersection at Skinker needs some tweeking and soooooon

Honestly, I expected this half to be worse. It isn't the most convenient process in the world, but my drive to work isn't as bad as I thought. Fortunately, I'm not required to be in the office at any certain time. Also, the "back way" (beside the Best Buy in Richmond Heights) around Hanley/Eager is nice. That said, I am looking forward to the new Big Bend exits opening up...hopefully they make the same good time as they did on the western half.

I live on the eastern end of the closure but instead of going to the Brentwood/Hanley area to shop/eat, I go to Illinois.

The major problem I've encountered is the lack of left turn lights along Dale Avenue. It would be helpful, especially at rush hour, to have left turn arrows at Hanley and at McCausland. It is nearly impossible to make a left onto Hanley from westbound Dale Avenue.

I'm retired and do not have a regular commute. I take pains to do my errands between 10 AM and 4 pm when possible. In any case, I try very hard to avoid being out at rush hour. I used to use Forest Park Parkway a lot; now I use it as little as possible, using a Delmar or Vernon route east to Skinker, and Waterman or Lindell to get to my final destination or crossing point to St. Louis city destinations. This isn't good at rush hours but works well for my chosen travel times. I always plan my errand schedule to achieve several errands at once, for example, gas, post office and grocery store, or a trip to 3 or 4 destinations along Brentwood, like PetsMart, Trader Joe's and/or Whole Foods, Target and/or hardware needs at any of the three stores in that area. This saves time, trouble and gas. I rarely drive more than 2 times a week unless I have volunteer work to do, which I can't usually schedule myself, and sometimes I do errands in conjunction with that to save time and travel.

Satisfaction Comments

The following comments were left in response by those who wanted to leave additional input after the satisfaction questions (for example, *Please indicate your level of satisfaction with how well the public has been kept informed about the New I-64 Project*). The comments are presented as they were received.

Great Job. I am convinced this project will finish on time.

I suffered change of commute time from 20 minutes to 50 minutes for a year while the western half was being done- and I did so mainly with a smile - I love the new section that is open - - but am having a very hard time being trapped north of 40 especially since someone caved to the complaining Boland residents and let them close that route off - people cut through my neighborhood all the time - I should be able to cut through theirs!

Having no way to get from Clayton Road to Manchester between Brentwood and Bellview is a ridiculous traffic plan. Closing Hanley and Big Bend at the same time was bad enough, but now that all the streets between Hampton Park and Big Bend are one way it's impossible!

I was very satisfied with how the closure has been handled up until this month.

It's funny, when you closed the west half of I64 you did not close two major overpasses within a mile of each other at the same time affecting 75,000 drivers each day. Why didn't you close Big Bend earlier and then do the little over/underpasses that we no longer have access to? AGAIN, STUPID PLANNING!!!!!!

The choices of answers do not leave room for discussion. There is a lot of inconvenience to the people who use streets for travel instead of the highway. A lot of alternate routes are longer and slower. I do not feel that employers have cooperated by adjusting hours of their employees, either. This could really help, but I don't see it being done.

Alternate roads are far too congested at peak times. Lights were not retimed to accommodate the additional traffic flows which makes these roads very hard to drive on.

I hope all major highway construction can use the new I-64 as an example of how things should work.

Knowing what I know now, I would rather have had lane closures for 6-8 years.

I'm glad that we are trying to do things as fast as possible. However, I don't think it's such a great idea to force everyone traveling from Clayton to 44 to have to take Brentwood Blvd or go all the way around to Hampton. Closing both Hanley & Big Bend at the same time has caused my commute to now be an hour and thirty minutes when previously it was only forty five minutes.

This is immeasurably better than having to endure 10 years of hassles, lane closings, bridge closures, etc.

I don't understand why the Big Bend & Hanley overpasses needed to be closed concurrently when it was stated by MODOT before that they would not.

I have NEVER seen a "major city" shut down a whole highway. The Dan Ryan is much bigger than 40 and it was replaced without a total shut down.

The first half went just fine. The second? not so much.

There isn't big enough of a push for using other forms of transportation. The city could be advertising Metrolink and Metrobus as viable options for commuters, but I have not seen clear indications of that.

The decision to close Hanley and Big Bend at the same time was irresponsible.

The western half was much easier to work around. The eastern half lacks sufficient roads to get into and out of downtown without the highway open.

THANK YOU for doing it in 2 years. The western half is great...hoping the eastern half is comparable.

Contractors are doing a great job and so too is M-DOT.

Better maps showing the area need to be posted on the website. I am not from St. Louis and I have a meeting in the vicinity of the construction and there is not much there showing me, someone NOT familiar with the area alternate routes.

It would have been much easier to travel if Hanley and Big Bend were not closed at the same time. Makes it difficult for Wash U employees to go to businesses south of 64 on lunch break.

it would be nice if you had, in your press releases included an updated map of the area affected. A little more information would be helpful so people don't have to hunt for it.

Closing the highway for 2 years has affected my business in St Louis greatly. It has also affected myself and my fiancé by increasing stress while driving in St Louis. For those 2 reasons alone we are moving out of St Louis.

Outstanding job being done by MoDOT and contractors!!!!

The topography of the neighborhoods affected has changed and the limited landscaping solutions are inadequate. This is a project that is not helping the economic growth of the area. Some business have been lost in my area, growth is being hindered in the immediate areas and traffic between Big Bend and Brentwood is a daily nightmare. The creation of large dump sites in residential neighborhoods, with varying degrees of toxic inclusions is ridiculous. Fred Weber has quarry sites to get this material to-not in my air or watershed. If it had taken the 6-8 years, the dump sites would not have been created.

Although a bit inconvenient, it's gone far better than I expected. The 2 year complete closure plan is far preferable to the 6-8 year lane closure plan.

See previous comments. Please fix Eager Road!

I have been thoroughly impressed with this project. The project coordinators are organized, efficient, and communicate clearly with the general public. I have never witnessed such a large-scale project conducted with such efficiency and strong adherence to a time schedule. I applaud all members of the project team!

What a CLUSTERF#~%. I was travelling in St. Louis after a Cards game and then some sightseeing walking downtown last night (8/12) and drove out Market St to catch I40 West completely unaware of this project. Our FIRST warning was where we merged onto I40/I64 saying all traffic must exit. NO suggestions of detour routes at all!!! We attempted going North on Kingshighway and quickly found ourselves in what appeared to be questionable neighborhoods considering it was just after midnight so we backedtracked towards where we had always used the highway. We did finally see a detour sign at a corner (Oakland Avenue I believe - problem being there were TWO of them side-by-side with the arrows pointed at each other I think they had been moved there simply to get them out of the roadway. After a while we finally found Clayton Rd (a name I recognized from previous trips in the area) and now it'd eventually take us to I270. Someone deserves a serious cut in pay for failing to put ANY detour routes up for travellers not familiar with this area!!

You publicize the huge things - but lo and behold - we get stuck in the lengthy delays of these ongoing things - putting up the sound walls, re-striping, whatever. Explain to me why a brand spanking new highway has lane closures every day? NO EXPLANATION except that it simply IS NOT FINISHED.

Not sure it really matters how the public feels. It was something that was decided had to be done. I live in Illinois and work in Ladue/Olivette it is a pain driving to and from work. I do appreciate the Traffic Alerts I receive. I only wish they would have included side streets.

I don't see the expected extra traffic on 1-44 to justify the change in the lanes. Who thought of this???

I thought that there would be much more communication to the public on the status vs. schedule. Major things are announced but you have to catch a rare news piece to know if things are ahead or behind schedule.

The complete closures are simply awful! I tried to get to Webster Groves from Overland one day recently, and I had to go all the way to McCausland because all other southbound roads were closed because of bridge construction or the neighbors didn't want traffic on their streets. I wish we could have closed Page for the same reason. I hope this will never be an option again when MoDot does road repairs in the future.

Forest Park Parkway. What a nightmare.

I cannot believe that you closed the only major east/west access point to Saint Louis for two years. Complete idiots. I've lived in many cities across the world but have never seen administrative and construction incompetence at this level. The complete lack of access and possibility for future major administrative idiocy is the major reason why I've moved my business to Chicago.

OK, I was highly skeptical when this whole project started. After the west section re-opened, though, and experiencing the improvements (including those faboo flyover lanes from EB 40 > NB 170), I'm won over. I realize not many projects of this size/scope have been attempted. You guys have been terrific - at first, again, skeptical with the amount of local news time, etc. But appreciated it as time went on, knowing exactly what was closing and when, and the pains the project team took to give alternate routes, timetables, and work with the local businesses. The one thing that was AWFUL was the signage. 170/Eager changed so many times, and it was never clear which lane you needed to be in by when to safely get over. I still see people swerve dangerously to get on 64WB, not realizing that the right lane is to Eager and the next two left lanes are for the highway. VERY confusing, very dangerous. I also think the narrower lanes on 44 were a big mistake. Don't know what the accident rate is, but I avoid it like the plague because of the narrow lane size, the amount of traffic, the trucks. PLEASE restore these lanes back to normal size when this is over. Also, didn't like the elimination of bike lanes on larger cross streets, but realize it was necessary. Will they be restored? All in all, you guys have done a commendable job. I had serious doubts at the beginning, but it has worked out great - I have become better acquainted with some of the local businesses on Manchester, etc. and end up shopping there by choice now vs. the direct-from-hwy big-box stores. So that's a plus, too... NICE JOB!!!

If one name could be given for the responsibility of this decision, I would begin a campaign against him/her.

signs aren't always posted, workers don't stay within the spaces already designated strictly for them, things change multiple times every day with no warning on roadways.

The problem is not the closing of the highway - it's the way traffic & construction for all alternate routes is being handled. The closing of so many roads and bridges all at once has been paralyzing for the drivers in my area. I'm talking about the combination of the closing of 64 between Skinker and Hampton, the closing of Hampton bridge and the bridge on Oakland over 64, and the attempts nearby to direct the flow of traffic away from certain residential streets using one-way signs and blocking through-traffic from some streets. And then to top it all off, on Mar 6 you couldn't cross the Tamm st bridge by the zoo and drive past the zoo towards Hampton. The traffic was backed up all the way from Skinker to the zoo, stop and go traffic waiting to turn on Skinker. I don't know why you couldn't get through past the zoo. There are no signs warning you of this on the south side of the Tamm st bridge. There should be a lot more signs communicating these changes. I don't know how I'm expected to travel from Hampton and 44 to UCity. It's increasingly difficult. Skinker is a nightmare during rushhour. Forest Park Parkway is gridlocked, and it has ruined any streets that intersect with it. Big Bend is usually ok, if you can find a way to GET to Big Bend in the first place.

6-8 years would have been an absolute nightmare. By keeping us (the public) well informed we can adjust our commutes and/or driving routes to sidestep the current construction zone. It seems like a daunting task to many St. Louisans at first but once they discovered new routes to take everything settled down.

Eager/Brentwood Blvd I-170 are a mess with signage, lane markings etc.,

I live slightly west of Manchester and McKnight. The traffic has been horrendous on Manchester Rd, especially since I have to make a left out of my street. I know lots of people are using Manchester as an alternative (I know I am). I am looking forward to the traffic lightening up on Manchester now. My family lives in St. Peters so we already (today) have taken advantage of the opening. Great job. It's amazing how quickly it was done. I've enjoyed tracking the progress on your website. It's been educational for my kids too. None of us knew just how much went into demo and construction.

Population of the City is more dense than in a 5-mile stretch of highway in the county -- you didn't take that into consideration. Parking on Lindell

along Forest Park should be prohibited 24/7 during construction.

Over the weekend I was traveling west on Oakland and tried to turn left (south) onto Hampton to get to Manchester; however, there was a "No Left Turn" sign posted at Hampton and Oakland. So I proceeded west and -- like everyone else -- hit the barricades at the Oakland Ave. overpass and had to u-turn. I am angry that it was stated in the Post that drivers "ignored" the "Road Closed Ahead" signs -- there weren't any! If I was able to see a small "No Left Turn" sign, I would have seen a Road Closed Ahead sign. Furthermore, how did dozens if not hundreds of other drivers also "miss" this sign. I'm not nearly as angry about that overpass being closed early as I am about you claiming there were signs when there weren't any.

US61 signage was lacking. Effects on bicycle commuting appear to have been ignored for a year. I feel I was not told the truth about: - When work in my back yard would happen and be done. - What was sprayed on the foliage in my yard and what I could do about it.

I am glad the decision to complete the work in 2 yrs vs 6 yrs was made. Now, half of the highway is completed. Also, the coverage on local news has been good in keeping me informed of the progress.

The local media and Dan Galvin have been doing a superb job keeping us informed,

While the new section just opened, we could tell travel East and West via Olive has lightened substantially.

I wish all government-sponsored activities ran this well. Excellent communication and media relations.

While the job, as designed, has been managed well, I question the value of doing all this work to end up with a product no better than what was there before. It's shocking to see new bridges going in no wider than the old bridges, and the elimination of secondary access points (Galleria Parkway, Laclede Station Rd, etc.), that previously allowed us to avoid the horribly congested ones. Also, it's hard to understand why this job takes so long and why there aren't more crews and why they aren't working 24x7.

I think it overall was handled well until now, but I am concerned with the north / south routes coming up.

It's unreasonable to have Oakland Avenue closed to through traffic when there are so few alternatives for city dwellers to travel west into Clayton. It's a perfectly good stretch of road that is not being utilized.

I respond satisfied because obviously the 6-8 years would not have been a piece of cake but the east side is going to be ugly--you have Wash U right at a busy corner of an alternate and you have Forest Park sitting right where 10K people attend the Muny....you had none of those things on the west side.....

I hate that this starts in the dead of winter and bad streets its dangerous

Outstanding management, planning, and implementation. I can only feel disappointed that the additional sound walls were not already in place in this time since it is apparent that beyond the roadway, the project actually was NOT completed earlier than normal in whole.

The western closure was not as impacting as we all feared. I would give you an A+ on this. The eastern closure has crippled the center of the city. I would give you a F--- on this. All efforts must be given to getting 40 in front of the zoo open so that traffic on clayton can flow. This is a high high high priority section of the project.

A bunch of money was spent on the project completion count-down calendars for the highways - they have been turned on for a few days, but not regularly. Why was so much money wasted to not be used?

I take 70 in and the directional lanes need to change to Eastbound in the morning and west in the evening.

When I was a kid, I-294 around Chicago was completed one mile per week. They had to build bridges, move homes and started from scratch. They had almost unlimited labor resources and was quite a project. One Monday they were behind my house moving our neighbor's homes out of the way and grading the roadbed, by Friday they were pouring concrete, and on Sunday the road was stripped, signed, and it was done. Amazing. I assume blending the old and new takes longer.

Closure of Eastern half has impacted me so badly that the quality of my life has been doing down.

The ramps connecting west bound 64 and 170 have work zone speed limit signs of 40 mph but when I travel these I am the only one going this speed and have noticed other drivers upset that I am going this slow. Is this the correct speed or are the other drivers just not paying attention to the posted limits?

The Oakland closure and Dale Ave is a perfect example of the poor communication. I was traveling east on Eager on Jan 2nd and saw the signs for Dale Ave. My mom even pointed it out to me as I was heading to Dale Ave. Well, I ignored the signs because I knew that I could turn at Dale off Hanley...WRONG. I heard about this for the first time today...kinda late. Also, I think the alternative routes should've been better explored. Example, why is Jefferson Ave still not open southbound??? Also, closing Hanley and shifting the traffic to Brentwood was simply a ridiculous thought. Why didn't someone test these routes out on normal people before they just knock down overpasses and expect us to figure a way around it.

I think the western half of I-64 is beautiful!!! I hope all of the new plantings survive and look great for years to come. Thanks for making I-64 (west) beautiful!!!

Sometimes the signs don't make sense or they don't warn you until you're right there. I don't have any specifics examples, but I do remember a couple of times thinking I wish I knew this about 1 mile ago. I do really enjoy the new Western side of the highway.

The opening party was nice to go to, but there should have been people there with info about the carriage rides. We were there looking all over for where they were going to start, waited a very long time, along with many others, asked several people, who ended up giving conflicting info...we finally gave up just in time to see the 2 carriages arrive. 2 carriages for that amount of people? Not nearly enough. And they were small carriages at that. Other than that, we did enjoy being able to walk on the highway before it opened and look forward to doing so on the east part of the highway. Hopefully any activities (other than the bike rides, which were fun to watch) will be better planned and executed.

You have done a GREAT job communicating and getting everything done. My only complaint is the concrete lifeless jungle you have created on hwy 40. I understand home owners may have wanted them (but why did they live there to start with and I question the tactics used to get an agreement), but you have taken away all the charm and life out of the highway. You have even blocked business that I am sure relied on drive-by traffic. PLEASE reconsider creating the concrete vacuum on the other half. It's not that loud, I use to live by it. If it is too loud, move. PLEASE keep the charm and warmth that is St. Louis and don't block it out.

continued problems of grid lock at skinker and forest park continue. Police need to patrol southbound skinker for cars who block private streets and do not keep intersections open. signs are not sufficient and grid locked cars disobey. tickets by the gross are in order till behaviors improve.

While the traffic impacts aren't as bad as I thought they would be, I do not believe that doing this project with the highway open would have taken 6 to 8 years.

This project could have been done one side at a time as many other interstate projects are done without too much of an impact to the timeline.

There are enough people and construction workers unemployed that you could have doubled up on the crews and completed the project in less than two years with the total closure concept and maybe even saved some money as completion of the project sooner would have less of an inflation factor. Marsha marshab80@gmail.com

Obviously the Parkway is a mess. I do not understand why Big Band was not rebuilt at the same or almost the same time as Boland Place and Highland Terrace. That way it would be done now and the Hanley overflow would have a reasonable alternative.

The overhead signs, telling us how long the travel time is to a certain highway, are ALWAYS WRONG during peak times. The changeable speed limit signs on 270 are a joke. If I could possibly do 40 mph at 5pm on 270 southbound, I would take back every nasty thing I have ever said about MODOT. By the way, how much did those "Countdown To Completion" signs cost? Those have worked about 10 days over the past 13 months. Another huge waste by MODOT!

The east closure I don't take to get to work - but I travel that exact stretch for church and MANY other activities. Lots of friends live over there. It is INCREDIBLY inconvenient as all the alt routes are heavily trafficked and MUCH longer. Wish a better plan could have been made for the east close down. The west closure was much easier to find an alt route. But having the whole east stretch closed is killing me!

MODOT deserves credit for how relatively smoothly things have gone so far.

Who ever arranged it had better have been fired for this stupid idea.

you could have done this without shutting down the highway and in far less than 6 years. you can say six years but that is the party line bull crap to get what you wanted. I can NOT believe it would have taken to 2014 to get the job done.

While I realize it would have taken more planning and cost a few more dollars, I do not believe it was as much as you are saying. Also, the region has suffered because of the shutdown. I go to St Louis for work because I have to. I did not purchase my seats for the Cardinals, Rams or the symphony this year or last. I will consider it again in 2010 after the highway re-opens.

Mo Dot should have completely closed the highway for a yr

Gee, the world didn't come to an end, did it???

I can't wait for this project to be finished. It is sapping our city of people, economic activity and vibrancy. I hope that measures are being tackled to bring people back into the city once this is all over.

I am really tired of hearing from the people who nitpick and whine about everything! Some of the questions asked in the newspaper about the project are so picky!

Very smart to close only for 2 years. The impact has not been as severe as many predicted, and the benefit will be great.

you have caused massive traffic jams on streets and roads not equipped to handle the volume of traffic. this traffic has caused destruction of road surfaces with no thought as to upkeep and repair of the destroyed surfaces. the waste of time daily in my commutes during the first section closure caused me to alter my life significantly for one year when the project could have been done nearly as fast by performing the work sequentially on westbound lanes and then east bound lanes with total closure for the times needed to destroy and rebuild bridges. i hope that the surface is better built than the deteriorating surface of I-170 which has large holes in it already.

MODOT should insist that StL news agencies refer to the interstate by its true name, I-64. 40 is not the name of the interstate, so it's not I-64/40. If anything, it should be I-64/US 40. But no one in St Louis refers to it by anything other than 40 or Highway 40. The superseding name is Interstate 64. Signs, news updates, and other information should refer to it as such.

Just never heard of an interstate/freeway being closed in the middle of a major city; traffic in a city is to be expected...I'm just sayin.

I live right by the intersection of Forest Park Pkwy and Skinker (I live on Waterman). Traffic in the morning, since the Eastern portion of 64 closed, has been a NIGHTMARE! I never take Forest Park Pkwy North, to get to work anymore, and I certainly do not take it coming home. The changing of the stoplight timers has made the situation worse. If you don't want people to take Forest Park Pkwy, the timers never should have been changed--this would have made alot more people take alternative routes instead of majorly clogging Skinker. Again, the second half has become a nightmare. I want to commit an act of road rage every single day. Oh, I forgot to mention, since the 2nd half of the closure, and everyone and their brother taking FPP, I have never heard so much horn honking in my life. Even after I finally make it home, it's honk, honk, honk for at least an hour.

I am strongly dissatisfied that Hanley, Hampton and Big bend overpasses will be closed at the same time. Is this a conspiracy to keep the north and south side residents of Clayton road from getting anywhere. On any given day, Brentwood is a mess and then next nearest route would be kingshighway!!!

1) Screwed up on Lindberg to west bound I64. Right lane goes straight, left lane ends. You have it confusingly marked with the right lane ending and the left lane going straight. Really mixed up here? Accidents waiting to happen. (It needs to be consistent and it's done both ways all over town) 2) East bound I 64 @ I 270 ONLY TWO LANES GOING EAST???? That's nuts!!!! What a mess you have created. You have eliminated a lane and caused a backup & accident zone for out of towners. I thought we were trying to make things better? 2 Lanes on east bound I 64 is going to be a mess for years to come. 3) Spoede both exits suck. East bound exit. Mound of dirt blocks view as you approach intersection at Spoede & Outer Road, Fence totally blocks view of oncoming south bound Spoede traffic, another accident waiting to happen. 4) West bound Spoede entering I 64 has a sharp turn and no barrier. Cars will end up down there and the entrance ramp is too short. I thought you were going to improve it? It's shorter?

I don't understand why the streets in the "Dogtown" were blocked. It is difficult to drive the routes in the area.

AS I have said before, more attention could be paid to routes north and south across the closure. I live north of it near Delmar in U. City and do the bulk of my shopping south of it, mostly in Maplewood and Brentwood. So far, if I follow the precautions and routes described above, I do pretty well, but I really dread the Big Bend closure, which will considerably lengthen my route for my most frequent errands, especially if Hanley Road is still closed.

Alternative Route Comments

The following comments were left in response by those who wanted to leave additional input after the questions about alternative routes. The comments are presented as they were received.

I do not drive the interstates to work. I live in Affton and work in Clayton. The only way to work is either Skinker, Big Bend (closed), Hanley (closed) or Brentwood.

At rush hour, it is better to take I-44 and I-270 and the west half of I-64 to get from the central west end to Clayton than going through midtown i.e. Forest Park Parkway.

If you are a visitor to St. Louis, I think these "improvements" would be no help at all. The ones I have seen are confusing. If you are driving along in the made 60+ mph traffic, and you just entered St. Louis, you would be sunk.

I-44 people tend to drift when they drive lanes a little to close

Walking, biking, car-pooling or riding Metro to work are completely inefficient for me and my job. Interesting how you didn't care about my feedback to those questions.

The lane changes on 270 have been convenient... I'm hoping they don't turn the highway into a bottleneck when they are gone.

If the lights on Manchester have been coordinated, it would be hard to tell. Also, it would have been helpful if you did something to open up traffic at Manchester and McCausland, and through Maplewood. The McCausland intersection is a nightmare. Forest Park Parkway is no picnic either!

511 doesn't work on my cell phone

The narrow lanes on the other interstates were not worth the \$\$\$ to put them in and then take them out after the construction. They were a waste of my tax dollars!

There is no sholder on I-44 and it is very dangerous. I hope that the lanes will be put back to how they were before the project.

Sometimes your times aren't accurate. Maybe a couple of minutes off. Usually in traffic it takes about 18 minutes from I255 (at JB Bridge) to I40 in the a.m. On the whole, a very good job. Love the signs. Read them all the time.

The additional lanes on 44 have increased accidents and make driving in those uneven lanes very hazardous. No shoulder means people that encounter a flat tire are forced to ruin wheels by driving on the flat until they can make it to a shoulder sometimes miles down the road. I am positive that a number of deaths have occured due to the uneven lanes, increased traffic and no shoulder on 44. I would also assume Road Rage has increased with the traffic on 44.

With the closure of Eager Rd. at Hanley, it seems no one thought of the effect on the traffic on Dale and through the shopping area in Brentwood. The traffic is not allowing garage traffic to exit, nor actually stopping at the crosswalk from the garage to the office buildings. Someone needs to direct traffic At the intersection of Dale and Hanley and at the stop signs-Best Buy and Metrolink. Gateway Constructors does not plan well for the traffic around the road blocks they are creating and have created.

the temporary lanes on I-44 are VERY NARROW and dangerous espically late at night when more intoxicated drivers are out after the bars close!

What's "511"? And I saw ABSOLUTELY NO info dispayed alerting of this interstate closure!! (We came into STL from Hannibal using 61 then I70, spent time downtown, and then intended to use 40/64 to get back out to 61 for our return home.)

The traffic signal timing is a no-brainer. We KNOW that it saves fuel. Why is this not a permanent thing REQUIRED of all municipalities? There are, of course, many places where lights are NOT synchronized.

The extra lane on I-70 has been very nice. The ramp from I-270 to I-70 had horrible merges both in the middle and at the end before. Now it's easy to do. Has MoDOT considered keeping that ramp configuration or otherwise maintaining the extra lane in places (perhaps as an auxillary lane)?

Suggested detours to WUSM are ineffective and dangerous. If we travel the suggested route to the Clayton parking garage, we find the street tore up ALL THE TIME. More than once for different reasons. Try traveling West down Clayton toward Taylor. Why block out side street parking where commuters used to be able to park for free????

Please do everything the state can to keep light timing synchronized on streets like Manchester.

The day they closed the first section of Highway 40, Overland changed the timing of the traffic signals on Page Avenue, especially the "Overland Nightmare" series of signals between Walton Road and Woodson Road. This makes it impossible to get through five intersections without having to stop at each light. How did they get by with this?

It's hazardous when cars break down on 44.

The lane addition on I-44 has been so great, I wish it could stay that way. Traffic has been even better than before construction, for the most part, except on Cards game days.

The idea that you can close the major point of entry east/west into Saint Louis is completely incompetent. This idiocy has added at least 30 minutes to my daily commute one way and has resulted in me moving my business to Chicago rather than drive an extra hour each day. This decision was completely irresponsible.

The narrow lane lines were horrible, dangerous. Please restore proper width. Also, elimination of bike lanes on Ladue/Clayton was rough. Multiple changes at Hanley/Eager/170 was very confusing. Signage, more of it, more prominent and giving better guidance would have helped a lot.

adding lanes has caused more headaches (if accidents or otherwise exist, nowhere to go and causes further delay). the additions also weren't fixed to keep the roadways level, causing much tossing around of vehicles.

I had no experience previously with the added lane scenario implemented for I44, I70 and I270. Now that I've driven these roads I am against the practice. This could possibly be a workable solution if large trucks were banned or restricted to certain lanes. For me the time saved is not worth the harrowing experience of travelling in such close proximity to other vehicles.

I-64 closed messages on electronic signs is old news that you ought to have on permanent, long-term signs. I thought the expensive signs were for reporting stuff that "just happened".

The signals on the Forrest Park Parkway are never timed correctly to alleviate the endless bottleneck from Clayton to Kingshighway.

The light at McKnight and Litzsinger was my most favorite improvement. It had been needed for so long and I HOPE it never goes away!

The light at Warson and Ladue serves to slow down traffic quite effectively. You did not ask about the added center turn lane on Clayton. It obliterated the bike lanes so well that I feel my life is in jeopardy riding my bike on clayton when it used to be a most preferred bike route.

I am VERY unhappy, and feel we were deceived that the sound wall would be complete before the re-opening of the western half. As a taxpayer, why does the contractor deserve a bonus payment when procurement of critical materials was not completed on time? I feel the overall project was successful, but I feel this aspect was not at all addressed.

Traffic signals on Union Blvd northbound to I-70, I leave at non peak hour before 6 am, and usually hit 6-7 red lights in less than 3 mile stretch. I find the same with Kingshighway and Forest Park Pkwy.

The S I 270 to W I 64 dedicated entry lane was excellent and I am dissatisfied that it is no longer used. It relieved a cumbersome bottleneck.

It seems that there is no sense of urgency in clearing accidents. Out east, they just push vehicles out of the way and out of the drivers view as quick as possible and then deal with the collision.

the traffice signs on 44 do not ever change - if there is an accident or slow down it rarely tells you about it

Remove or shorten (on the Forest Park Parkway) all of the stoplights on Forest Park Parkway from Euclid to Big Bend - these traffic lights are causing terrible delays on FPP.

I-70 and I-270 the extra lane helped, but on I-44 it made the road too narrow

*The extra lanes on the highways probably help but are extremely dangerous!!!!
They must be removed immediately upon completion!*

The Temporary Lanes are very difficult to drive on. You basically drive on the rough pavement that used to be the shoulder.

During the second half of the project, the congestion on Forest Park Pkwy. has been awful. Much more traffic could be moved through quickly if the traffic lights were timed better. This could be the best alternate route in place of Hwy. 40/64 while it's closed, but instead it has been a parking lot.

Pavement on west bound FP Pkwy between Grand and Kingshighway is pretty rough along the right shoulder.

Why isn't there temporary lane addition in shoulder area on I-270 east of I-170? Illinois commuters have been completely ignored by MODOT - to suggest that I-70 is a viable alternative to I-64 as a means to get to Clayton is completely ridiculous.

Traffic light timing changes to support the western half of the construction, now need to be changed back!

From what I see on the morning news, 270 IS HORRIBLE!

I don't have an opinion on this, but I do for the commuting. You have to keep in mind working parents. Believe me, I would LOVE to leave for work earlier or carpool, however, I have two school age children. I have to have a car for emergencies. The kids schedule stayed the same, so does mine. However, now I have to work later to make up for my new start time. I am lucky because my husband picks them up. I can't imagine if I was a single parent trying to accommodate this. Plus, I checked out the bus routes. It takes way too long to get around.

variable speed signs were often not accurate. 511 didn't provide info on alternates to Clayton Road which was my main alternate while the west part was closed.

The addition of an extra exit lane on southbound 270 to 44 east has made an extremely positive impact on the traffic flow at that interchange. I hope this will be considered a permanent change after 164 opens.

Trucks still speed on interstates but have narrower lanes. They can be pretty threatening.

metrolink needs to handout free "try me" passes with a ridefinder link to single passenger cars lined up at lights at big bend, skinker and debalivere to induce using the metrolink next to them and reduce forest park traffic. I'm sure Wash U students would be ready activist volunteers. Be much more proactive to change st louis attitudes to use light rail and bus. Get more employers to incent the cost of commuting with green methods, carpools and light rail, especially those with parking problems.

The temporary lane additions in I44 and I70 should remain as permanent at the conclusion of the project. Marsha marshab80@gmail.com

Restriping was very dangerous - no shoulders!! Trucks and busses are not staying in their lanes, and wander into mine way too often. The Traffic Response guys seem to be doing a good job, but the incidents are reported on the radio/overhead signs too late to pick an alternate route. And - usually the info is wrong. Wrong lane reported closed, wrong direction on the highway, etc.

I-44 LINE PATCH PULLS MY CAR ALL OVER THE PLACE. IT'S HORRIBLE. NOW I STAY OFF 44 ALSO.

The temporary lanes on 270 and 44 should be made permanent after the I64 project is done. They are more important to traffic flow rather than having the empty shoulders.

Since I didn't frequently travel my alternate route before construction, I don't know if impacts were better or worse.

I do not believe the statements that 6-8 years would have been required to accomplish the task if a different method of construction had been chosen. I think that extra time would have been measured in months.

The message boards are awesome through the metro :-). Keep those working...it's awesome! The St Louis City Streets Director is completely ineffective...he is totally out of his league.

The signal timing on Forest Park Parkway is a joke. If you wanted people to stay off of it, you should have never timed the lights shorter to accommodate the idiots who continue to use it. This has caused severe backups on intersecting streets (aka Skinker). Common sense was definitely not utilized in this decision

the extra lane on 44 makes it bumpy and uneven, I think it's dangerous

I don't recommend travel on those hwy's as the lanes are too narrow and dangerous. The improvements on the western half do not justify the cost and problems caused. It won't handle more traffic if it narrows down to 2 lanes at any point. We should have left it alone or built a better and larger highway. Improvements that move traffic are minimal. Hey it looks great !

Westbound Dale Avenue at Hanley is a NIGHTMARE at rush hour.

I've not used or experienced the 3rd and 4th services. I have found your on-line service very useful. The signal timing efforts have helped with traffic involving the Parkway, but I'm VERY GLAD that I retired a couple years before this work took place (I worked at the Washington U. Medical School, and I'm pretty sure my commute time would have doubled or tripled. The city of St. Louis has planned especially badly for this trip, with the work on the Jefferson and Delmar Station bridges being done at the same time. It's especially interesting that the work on both of these bridges has taken them at least twice as long as it has taken the state to replace any bridge. I've felt that their notification about these projects to be pretty abject as well. The way I found out that the Jefferson bridge was down almost three years ago has when I started to turn off Chouteau coming west o use it; there wasn't even a warning sign on Chouteau as I recall, just a sudden absence of any street where Jefferson used to be. I assume no one landed in the void below, thought at night it would have been a real hazard.

How to Contact Comments

The following comments were left in response by those who wanted to leave additional input about how MoDOT could best provide them with information. The comments are presented as they were received.

Radio news is best since I spend most of my life in the car these days.

Not helpful, but "all of the above" should be used! And constantly direct people to the project website. Even so, you'll use the media as well as you have and then have clueless folks who are surprised by changes, closures, etc. You can't cure stupid -- but you can keep the rest of us informed, and so far you've gone a great job being visible and getting the word out.

TV program and commercials.

Strongly suggest AGAINST sending out things through the regular mail -- I believe most would view it as "junk" mail. The cost to produce and mail should be used for the IMPROVEMENTS!

I am concerned about the LAND APPLICATION UNIT being developed in front of my home. What was once a man made glade is now an eyesore of a dirt and debris. This debris could have been transported to the Weber location in Ladue by the many dump trucks and tractors that are now causing respiratory distress in the area 6 days a week (which is strange with 3 water trucks at the cement mixing site east of Brentwood Blvd). I have seen no aerial shots or topographical displays of the final construction, but was told that the land would be returned to its former natural habitat-a glade with blooming trees and flowering bushes. I have lived in the same location for over 50 years and remember the land during the original building of Highway 40. Time changes all things, but to create a dump in a Historic area is unbelievable.

I love the construction web cams. I look at them daily to see the progress. Good idea!

Any road signs beyond simply "INTERSTATE CLOSED - ALL TRAFFIC MUST EXIT" would have been nice.

I believe that the info has to come in a "hard" form so that it can be studied and evaluated rather than being a 30 second "sound bite."

The weekly chats on STLToday.com have been invaluable. If MoDOT continued to periodically have those chats (or perhaps just had an ongoing open Q&A section on their website) I would certainly continue to read it.

I never pay attention to the road signs providing information on construction, I am too busy driving trying to not get hit by those big trucks on 1-44. The signs don't give enough information to be effective anyway and if they did, I would have a wreck because I was trying to read all the info instead of driving. It has become so cumbersome to get to the zoo this year that my large family did not make the trek this year. If information is sent via USPS mail, it should be a postcard type mailing or I would probably throw it away as junk mail without reading it.

I thought that I signed up for email updates but I have never rec'd any about this project.

PLEASE don't put any more signs on the highway. It causes people to pay more attention to the signs than how they are driving. Rush-hour traffic is only made worse by these signs.

MORE SIGNAGE - guessing which lane to be in far enough in advance to avoid bottlenecks and dangerous maneuvers...still see lots of people cutting over and cutting it close at the 170SB > I64WB interchange. Little nervous about another winter and ice on those flyover lanes <grin> - first time around that curve on snowy day was...scary!

I have seen a few signs, but have noticed almost no attempt to get this info to the public, aside from a few newspaper articles. Oh yeah, and some pamphlets in a McDonalds! What about grocery stores, libraries, malls and many many more road signs.

I would much prefer to go to your web site to read the latest information but the news media seems to be doing a better job of getting the word out of upcoming changes. Today I read in the Post Dispatch about the closing of the Brentwood bridge overlapping with the closing of Hanley. I'm sure glad I read the paper today!!

I like the MoDot Emails sent out on a weekly basis

I like receiving email updates on the I-64 project.

Local television news and morning radio has helped us the most.

I tried to map my ride and it isn't working for me. I need to find sites that truly are working with the closings.

The regular emails from MoDOT have been by far the most helpful for me and my family.

our office on Big Bend had a representative on MoDot come to our office with information, hand outs, answered all our questions!

email, email, email road closures BEFORE they are closed.

it doesn't really matter how you notify the public about changes they don't notice them or read them.

It's a shame the countdown signs aren't always "on" and functioning.

I like the flyers that I have seen at my gas station at dale and hanley that have been published and distributed by MoDOT

More display boards on alternate routes

I don't have a TV, get a newspaper and rarely listen to the radio. So I would go look for info online as I heard about it. But it would have been wonderful if perhaps you all would have partnered up with the various business/companies/organizations around the metroplex to equip them with info and alt route suggestions to communicate to their employees (or to at least give them the info/option to sign up for any newsletters/emails that you all might have provided). With the west closure, I did move from the city to west county since 64/40 was what I took every day to work. The people running my company didn't know any more about the project than I did.

I get frequent update information from the Richmond Heights e-mail alerts

See previous comment about calling I-64 only I-64 rather than mentioning Highway 40

The message boards are awesome...they're great :-)

Placed on the road to receive the work one week prior to construction.

I no longer take the daily paper, so that is less useful to me. TV news and on-line notices are most effective for me, though I think that radio is probably useful for many people, who listen while they drive, and the signage about closure on the feeder routes are also very good, because they allow drivers to plan alternate routes on the go, and avoid the centers of real congestion. I'd still like to see more information about north-south routes about the closure, and I think that on future projects the highway department would do well to remember that the St. Louis region goes a very long way north and south, and many people commute or have necessary contacts which require them to use mid-area east west roads on a regular, frequently daily, basis. They could also try to see that St. Louis and other towns near such projects work harder at having their road projects near such construction in better order, that is, finished, before a major route is taken down. The Delmar Project is a prime example of such a misjudgment, even at the times of day I travel, I've seen two block long lines of traffic creeping across the bridge in the single lane traffic. I can only shudder to think what it must be like at rush hour.

Alternative Website Comments

The following comments were left in response by those who responded to *If you heard about the closure through one or more sites not listed above, please tell us which site(s)*. The comments are presented as they were received.

twitter would be nice.we could get a text about work going on even if we are out and not near tv or computer

KEZK does a really good job with updates from KMOV

There are no minority communications listed and you are working in a diverse area of the city and county. Try a little harder to get the message to ALL.

<<http://www.urbanstl.com/>>

I get the best information from signs in the businesses that are impacted by the highway closures -- especially Dierberg's.

My favorite source was TheNewI64.org. You guys did a great job keeping communications updated, easy to access, specific to areas of interest, printable to keep in the car for reference or for out-of-town visitors. Nice job!

KWMU

KWMU - 90.7 FM

TheNewI64.org

I will add these sites to my favorites and check them out.

KWMU

stltoday.com

i watch info on thenewi64 and am active follower of the changes, i'm not at all standard commuter.

msn.com

Fox News FNN.com, Google.com, Googlemaps.com

mapquest.com and maps.google.com

tv 11

Richmond Heights citizen e-mails

I-64 Project Website Comments

The following comments were left in response by those who responded to *What additional information would you like to see on the I-64 Project website?*. The comments are presented as they were received.

The construction zone map does not tell the exact date bridges will reopen. Map my trip is not functioning.

a pictorial update on what has been completed and what is going on now

Dates stretches will open.

Better maps - some of those aerial views didn't make it really clear what it was going to look like. Is Eager Rd getting an extra lane, for example? THAT street has been a mess ever since Target went in. I avoid it from T'giving until New Years. The holiday shopping traffic is worse than around the Galleria...awful on Saturdays, too...

Keep us informed on what "leftover" work you are doing on the western half of the closure (I noticed today that soundwalls are not done yet)

When closed areas (eg crossroads, bridges) will reopen.

I love the maps. Very interesting.

Clear maps showing alternative routes across the closure.

The New I-64 Economic and Regional Mobility Study

Quarterly Report #8

October 2009 - December
2009

HDR

Before the Closure

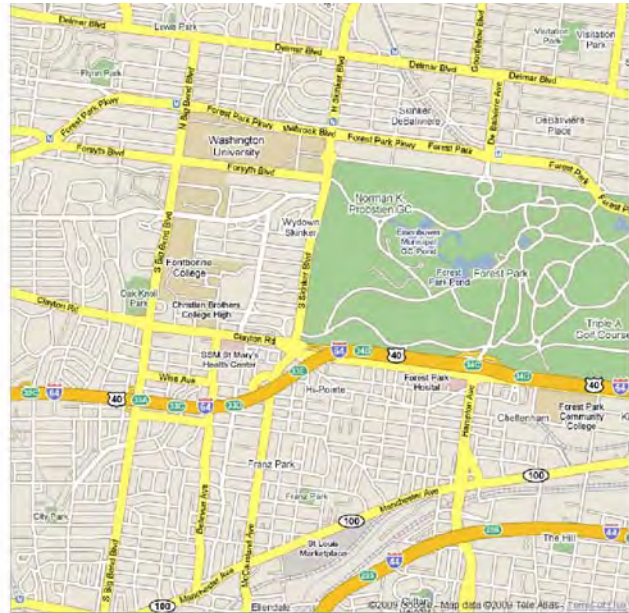
Please indicate how much time it takes you to make certain trips now compared to how long it took you before the closure.

	Not affected at all (0-10)	Minor increase in time (11-20)	Some increase in time (21-30)	1 to 5 times longer (31-40)	5 to 10 times longer (41-50)	10 to 20 times longer (51-60)	More than 20 times longer (61-70)
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1. Executive Summary

On December 7, 2009, the eastern section of I-64 between I-170 and Kingshighway Boulevard was re-opened. With this segment re-opened, the full closure construction component was completed for the New I-64 construction project. Partners again implemented their regional command center operations to ensure that any traffic flow conditions were addressed and responded to as the traveling public adjusted to the re-opening of I-64.

This quarterly report assesses the period October 2009 through December 2009 that includes the 22nd, 23rd and 24th months of the I-64 closure, evaluating the three key areas of **Communications** (MoDOT's provision of information to the public, and the public's response to the project), **Mobility** (the effects of the closure on travel behavior, choices, and traffic flow), and **Economics** (the effects of the closure on businesses within the corridor as well as the economic health of the region). With the eastern closure now in place during this quarter; the study will continue to focus its attention on potential differences between the eastern and western closures. In the 4th Quarter of 2009, the research team found the following information:



Communications (pp. 2-4)	Mobility (pp. 5-22)	Economics (pp. 23-29)
<p>Surveys indicate that the overall satisfaction level remains high for how the project has been handled.</p> <p>The Eastern Closure appears to be having more of an impact on travel behavior based on responses from “where I shop”, “how often I travel to certain areas” and “how well I managed to move around St. Louis”</p> <p>TV News, Internet, Radio News and Roadway Signs were the leading ways to get out information on the construction project</p> <p>Information from Motorist Assist and I-64 Traffic Response on the two survey questions still remained higher than online surveys when asked the same question</p>	<p>Traffic volumes continue to be higher on the designated interstate routes and adjacent arterials. Daily volumes are up on Interstates 44, 64, 170 and 270 in certain sections.</p> <p>Average speeds were down slightly along certain corridors. The range varies from being plus (up) 31% on I-44 eastbound in pm peak period to being negative (down) 14% on I-70 westbound in the pm peak period.</p> <p>Travel times trends were similar to average speed being slightly up and down along certain interstate. Arterial travel times were mostly stable for the quarter with exceptions in October for Route 141(PM Peak) and Route D (AM Peak) showed an increase in travel times</p>	<p>Both corridor and non-corridor jobs and wages were lower in the 2nd Quarter of 2009</p> <p>Unemployment in the St. Louis area is tracking very similar to the national trends in both 2008 and most of 2009. In November, unemployment in St. Louis was 9.8% about 0.4% higher than national average.</p> <p>The 3rd quarter taxable sales decline following wages and employment trends. Annually the 3rd quarter declines and rebounds in the 4th quarter and 2009 is following this trend. Taxable sales in 2009 were down 9.1% when compared to 2008</p> <p>The taxable sales during 3rd quarter of 2009, when indexed to the 1st quarter of 2005 fell below the 1.0 index for corridor, non-corridor and St. Louis City; St. Louis County was already below 1.0 meaning all areas have taxable sales less than the 1st quarter of 2005</p>

2. Communication

In the 4th Quarter of 2009, 898 people have been surveyed to measure their opinions about the closure and how it may have changed their behavior. Two survey instruments were utilized in this research. The first, an online survey, was a detailed instrument designed specifically for this project. For the second instrument, two key questions were also added to the motorist assist surveys distributed by MoDOT operators after providing traffic assistance to motorists in need.

People accessed the online survey through MoDOT's New I-64 website. 102 responses were generated in October (24), November (29), and December (49). 95 of these responses were by first-time visitors to the survey. 4 people had taken the survey before and another 3 people were not sure if they had taken the survey before. This quarter, online respondents tended to be Caucasian (85.3%), male (74.3%), and a plurality (38.5%) made between \$60,000 and \$120,000 annually.

Motorist Assist respondents tend to be less affluent than most respondents. People in this income bracket are less likely to respond to mail surveys and online surveys, so two key questions were added to the standard surveys already distributed by motorist assist operators to ensure that the most important questions were asked of the lower income segment. 796 responses were obtained from the motorist assist programs (649 through MoDOT's Motorist Assist program and 147 through the county's Traffic Response program).

We will continue to assess information received on communication during the eastern closure in 2009 and compare it to the western closure information received in 2008. This comparison will show any consistency or inconsistency in the two data sets and may provide some additional in-sight into potential difference between the two closures.

Overall, the respondents have a high level of satisfaction with how the I-64 closure has been handled. As documented in previous quarterly reports, the Eastern closure had more of an impact on respondent's behavior than that of the Western closure. A sizable minority of respondents reported changes in their shopping and driving habits.

Online Survey

Based on the online data, the Eastern Closure is had a greater impact on respondent behavior than that of the Western Closure. "Satisfaction with how well managing to move around the St. Louis area with the closure" is noticeably different. Despite this reported increased impact, overall satisfaction with MoDOT remains very high – almost identical or slightly higher to the results received during the Western Closure. The Table below shows all responses received from online surveys for both the 2008 Western Closure and 2009 Eastern Closure for side-by-side comparison.

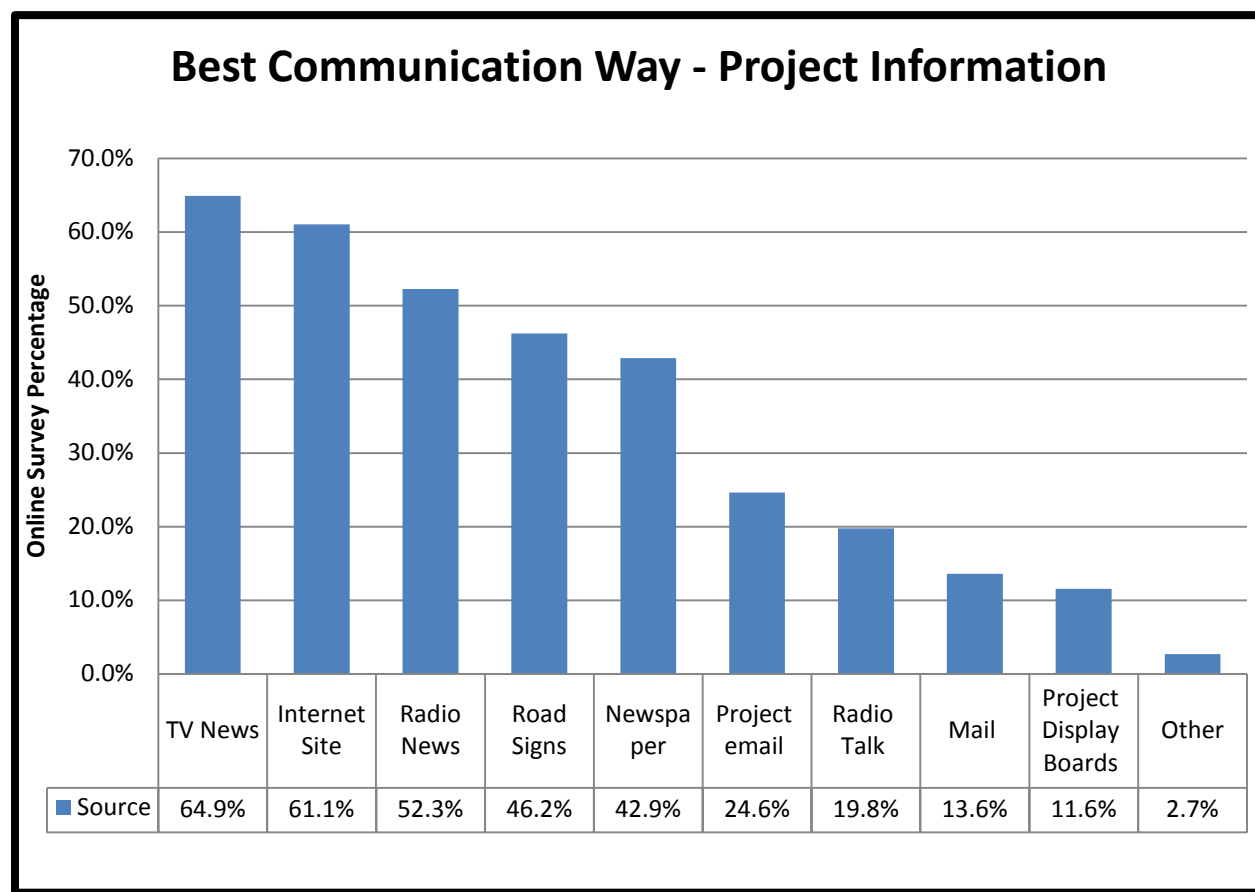
Key Public Indicators - Online Comparison of Both Closures	Western Closure	Eastern Closure	Total
Overall level of satisfaction with how the I-64 closure has been handled	76.7%	78.3%	77.1%
Satisfaction with how well the public kept informed about the new I-64 project	88.7%	85.5%	87.9%
Satisfaction with how well managing to move around the St. Louis area w/ the closure	69.7%	60.4%	67.4%
Satisfaction with timeliness of information being made available	87.5%	85.7%	87.1%
Agreement with “the closure has changed where I shop”	41.5%	47.0%	42.9%
Agreement with “the closure has changed how often I travel to certain areas”	73.3%	76.2%	74.0%
Satisfaction with decision to complete the work by closing I-64 for 2 years instead of 6-8 years w/ lane closures	76.5%	82.5%	78.0%
<i>Survey responses</i>	<i>1,362</i>	<i>444</i>	<i>1806</i>

Respondents are less satisfied with their ability to move around the St. Louis area. It was noticed they were more likely to state that the Eastern Closure has changed where they shop and how often they travel to certain areas. These responses could be the results of several different factors like the adjacent alternative transportation network, adjacent land use (commercial, business complex, residential, recreation, healthcare, etc.), lower response rate, second year of construction, etc.

The best ways to reach online respondents showed a slight change from the previous year with a move towards a more media driven source of information like TV, Internet and Radio. Road signing also saw a considerable jump in how information was received. The following table shows Western and Eastern closure results:

Best Way for MoDOT to Get Information to You	Western Closure	Eastern Closure	Total
TV News	62.4%	72.7%	64.9%
Internet Site	60.2%	63.7%	61.1%
Radio News	51.2%	55.6%	52.3%
Road Signs	43.2%	55.6%	46.2%
Newspaper	43.0%	42.6%	42.9%
Project email from MoDOT or I-64 Team	24.2%	26.0%	24.6%
Radio Talk Shows	19.8%	19.7%	19.8%
Receive Information in Mail	13.1%	15.2%	13.6%
Project Display Boards at Public Events	10.8%	13.9%	11.6%
Other	2.6%	2.9%	2.9%

The following chart presents the total column to graphically indicate the best way to reach these respondents based on the on-line survey tool.



Motorist Assist

Two key questions were asked in mail-in surveys given out by MoDOT's Motorist Assist program as another way of obtaining information. The change measured since the Eastern Closure has been minor, but in accordance with that of the other methods. People are still quite satisfied, especially with the decision to close I-64 for two years instead of six to eight years with lane closures. The following table shows the comparison made between the Western and Eastern closures:

Key Public Indicators - Motorist Assist Comparison of Both Closures	Western Closure	Eastern Closure	Total
Satisfaction with how well managing to move around the St. Louis area w/ the closure	90.0%	90.1%	90.0%
Satisfaction with decision to complete the work by closing I-64 for 2 years instead of 6-8 years w/ lane closures	93.8%	96.1%	94.9%
<i>Survey responses</i>	<i>3,837</i>	<i>3,666</i>	<i>7,503</i>

3. Mobility

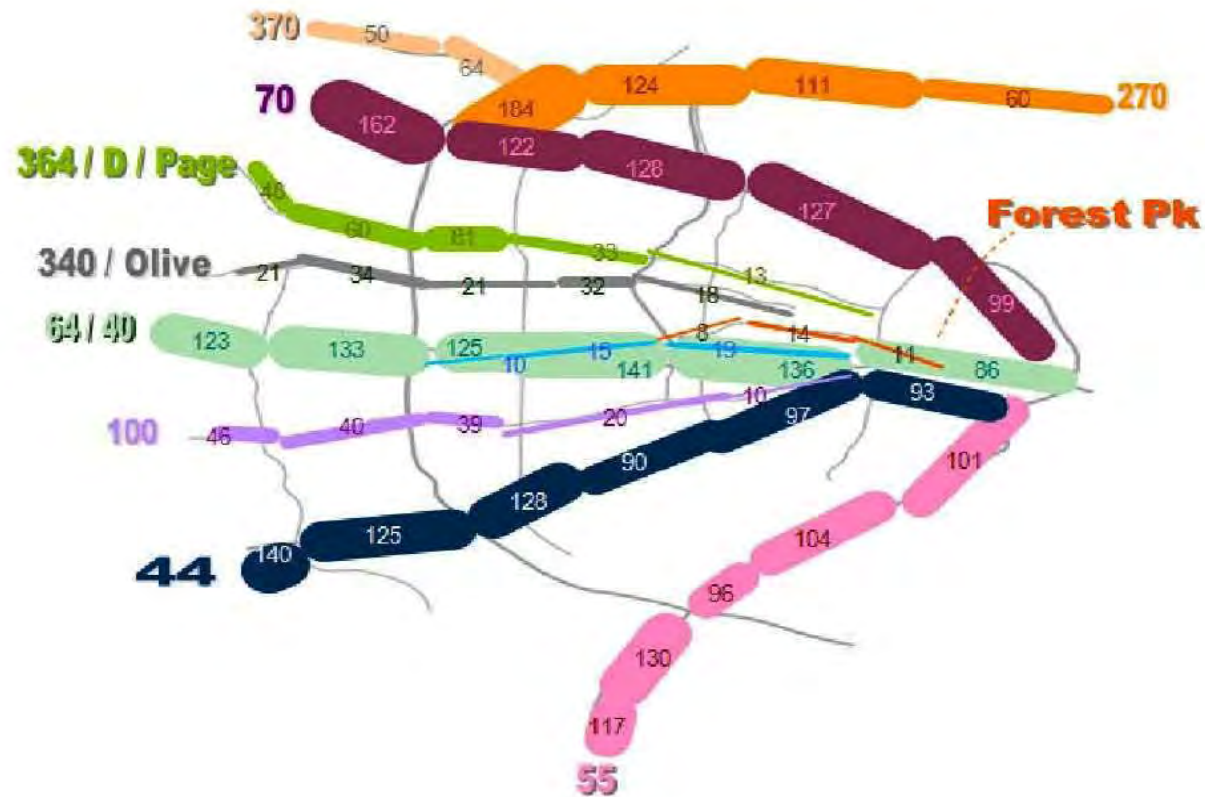
In this quarter, we obtained traffic data for both freeway and arterials. This information shows both baseline and quarterly traffic data for easy comparison of any changes in traffic conditions. Traffic data collected includes traffic volumes, speeds and travel times along various routes near the I-64 construction project.

Roadway sections by traffic volumes, average speed and travel times were developed. The tables and graphs will be introduced with a short summary of what was observed.

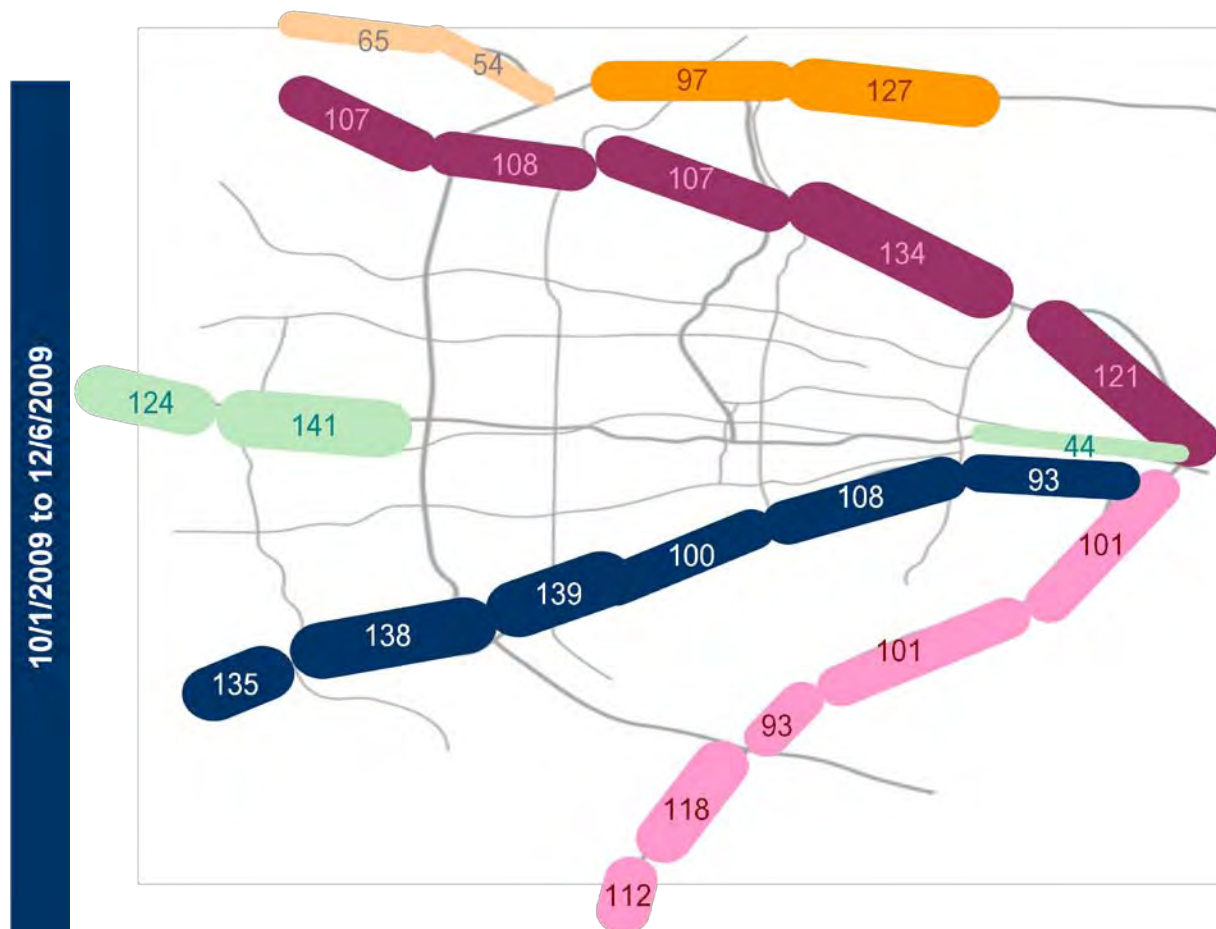
Freeways

We continue to notice increases in daily traffic volumes along I-44, I-70 and I-270 when compared to the baseline traffic volume data. Also, daily traffic volumes on I-64 west of I-270 are greater than the baseline (pre-construction) level. The four graphs show baseline and October through December 2009 traffic volumes:

EW Baseline



East-West Corridors Baseline Traffic Volumes



East-West Corridors 2009 4th Quarter Traffic Volumes

NS Baseline



North-South Corridors Baseline Traffic Volumes

10/1/2009 to 12/6/2009



North-South Corridors 2009 4th Quarter Traffic Volumes

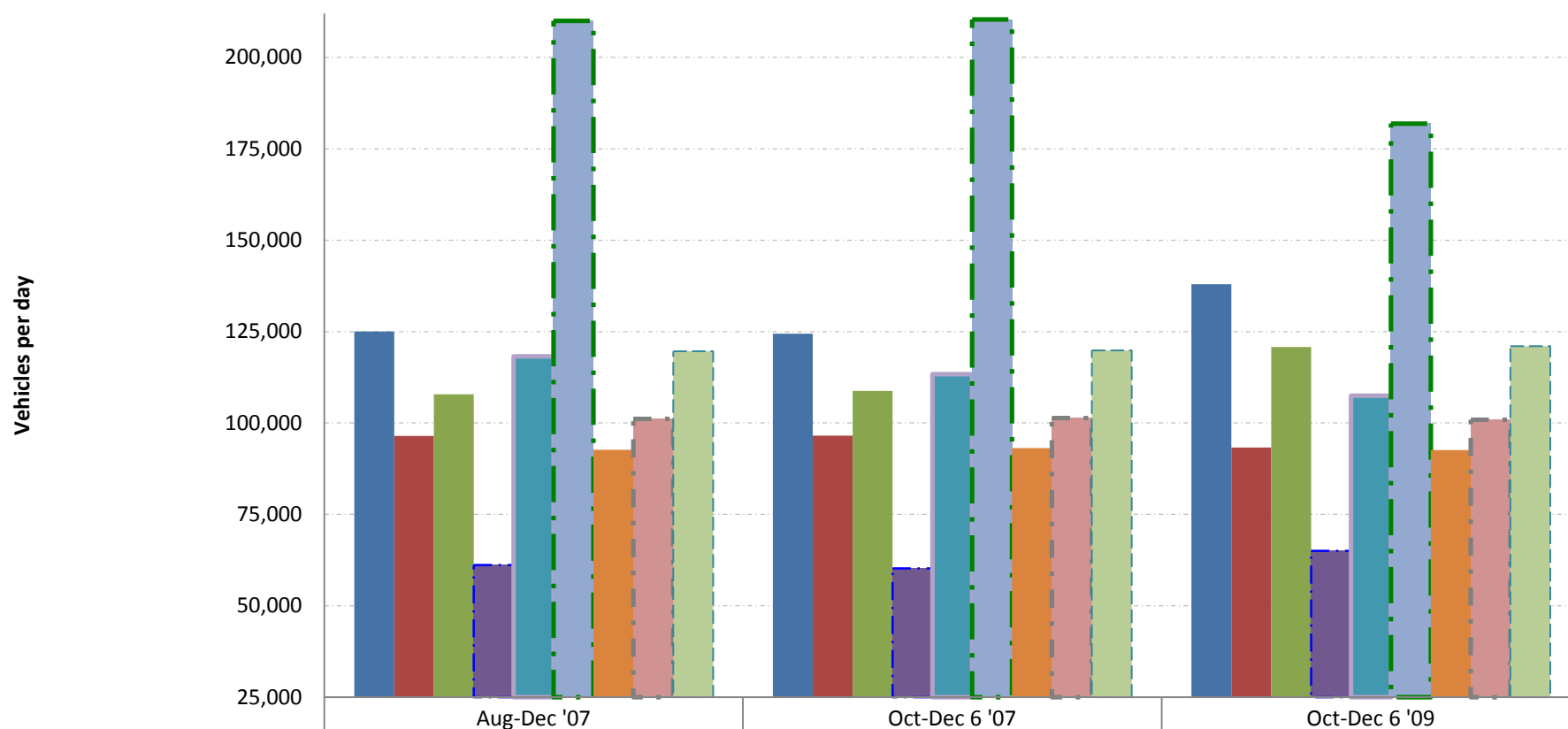
The following table shows daily traffic volumes, and average speeds and travel times information for the PM Peak periods. These selected sites were selected early in the study to designate some control sites to monitor that could potentially experience changes during the construction along I-64 corridor. These freeways were designated and signed with construction signing as alternate routes for potentially impacted traffic. By consistently monitoring the same sites, we can get a general understanding on how traffic is moving in the region. Index indicates how the 4th quarter of 2009 traffic conditions compared to baseline traffic conditions in 2007. Green highlighted index values show an increase in traffic condition measurement while the red highlighted index values show a decrease in traffic condition measurement.

I-64 Study Update - Freeway Information - Quarter 4 October - December 2009

Route	Location	Volume (vehicles/day)			Index	
		Aug-Dec '07	Oct-Dec 6 '07	Oct-Dec 6 '09	Oct-Dec 6 '09/ Aug-Dec '07	Oct-Dec 6 '09/ Oct-Dec '07
I-44	East of I-270	125,057	124,434	137,944	1.103	1.109
I-44	West of Mississippi Ave	92,641	93,130	92,577	0.999	0.994
I-55	South of Union Rd	96,447	96,559	93,295	0.967	0.966
I-55	South of Broadway	101,093	101,336	100,910	0.998	0.996
I-170	North of Page Ave	107,862	108,764	120,793	1.120	1.111
MO 370	West of Taussig Ave	61,167	60,217	64,995	1.063	1.079
I-70	East of Airfield Dr	118,242	113,362.2	107,434	0.909	0.948
I-70	East of Adelaide	119,620	119,863	121,018	1.012	1.010
I-270	At Ladue	210,012	210,335.2	181,896	0.866	0.865

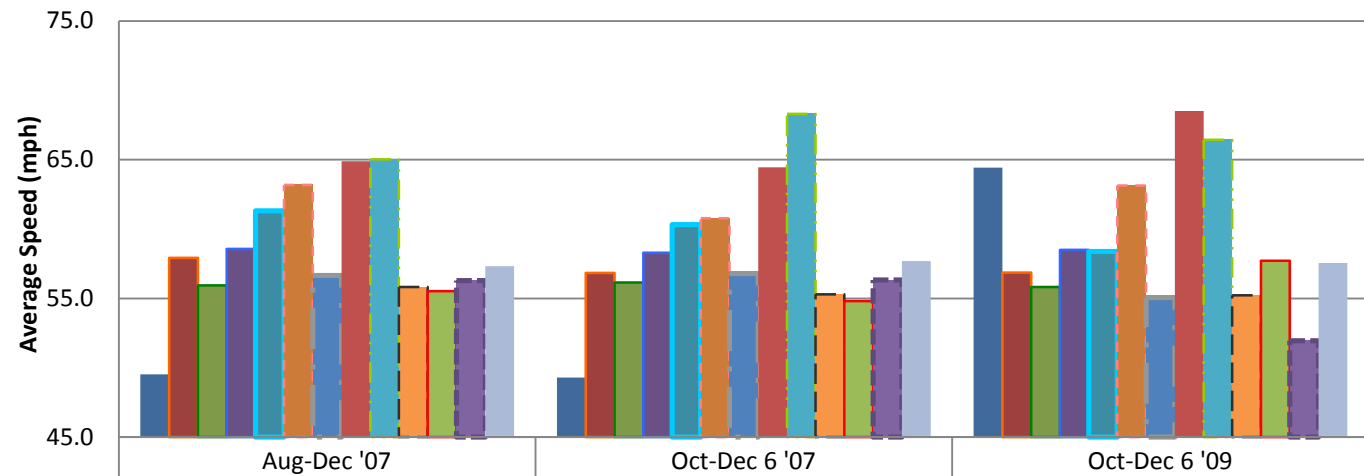
		Speed (mph)			Index		Travel time (minutes)					Index	
		Aug-Dec '07	Oct-Dec 6 '07	Oct-Dec 6 '09	Oct-Dec 6 '09/	Oct-Dec 6 '09/	Distance	Aug-Dec '07	Oct-Dec 6 '07	Oct-Dec 6 '09	Oct-Dec 6 '09/	Oct-Dec 6 '09/	
					Aug-Dec '07	Oct-Dec '07					Aug-Dec '07	Oct-Dec '07	
I-44 EB	East of I-270	49.5	49.3	64.4	1.301	1.307	I-44 EB	1.07	1.30	1.30	1.00	0.769	0.765
I-44 WB	East of I-270	57.9	56.8	56.9	0.982	1.000	I-44 WB	1.07	1.11	1.13	1.13	1.018	1.000
I-44 EB	West of Mississippi Ave	57.3	57.7	57.5	1.004	0.998	I-44 EB	2.89	3.02	3.00	3.01	0.996	1.002
I-44 WB	West of Mississippi Ave	58.6	59.0	57.4	0.980	0.973	I-44 WB	2.89	2.96	2.93	3.02	1.020	1.028
I-55 SB	South of Union Rd	55.9	56.1	55.8	0.998	0.994	I-55 SB	2.07	2.22	2.21	2.22	1.002	1.006
I-55 NB	South of Union Rd	58.6	58.3	58.5	0.999	1.003	I-55 NB	2.07	2.12	2.13	2.12	1.001	0.997
I-55 SB	South of Broadway	61.9	61.9	57.9	0.936	0.936	I-55 SB	3.87	3.75	3.75	4.01	1.069	1.068
I-55 NB	South of Broadway	60.6	58.5	59.4	0.981	1.016	I-55 NB	3.87	3.83	3.97	3.91	1.019	0.984
I-170 NB	North of Page Ave	61.3	60.3	58.4	0.952	0.968	I-170 NB	1.96	1.92	1.95	2.01	1.050	1.033
I-170 SB	North of Page Ave	63.2	60.8	63.1	0.999	1.039	I-170 SB	1.96	1.86	1.93	1.86	1.001	0.963
M370 EB	West of Taussig Ave	56.7	56.8	55.1	0.972	0.969	M370 EB	1.51	1.60	1.60	1.65	1.029	1.032
M370 WB	West of Taussig Ave	64.9	64.5	68.5	1.056	1.063	M370 WB	1.51	1.40	1.41	1.32	0.947	0.941
I-70 EB	East of Airfield Dr	65.0	68.3	66.4	1.022	0.973	I-70 EB	1.33	1.23	1.17	1.20	0.979	1.028
I-70 WB	East of Airfield Dr	55.8	55.3	55.2	0.989	0.999	I-70 WB	1.33	1.43	1.44	1.44	1.011	1.001
I-70 EB	East of Adelaide	60.8	60.3	71.9	1.183	1.194	I-70 EB	4.37	4.32	4.35	3.65	0.845	0.838
I-70 WB	East of Adelaide	55.6	54.9	47.2	0.850	0.861	I-70 WB	4.37	4.72	4.78	5.55	1.176	1.162
I-270 NB	At Ladue	55.5	54.8	57.7	1.040	1.053	I-270 NB	2.33	2.52	2.55	2.42	0.962	0.950
I-270 SB	At Ladue	56.3	56.3	52.0	0.923	0.922	I-270 SB	2.33	2.48	2.48	2.69	1.083	1.084

Average Daily Traffic (ADT)



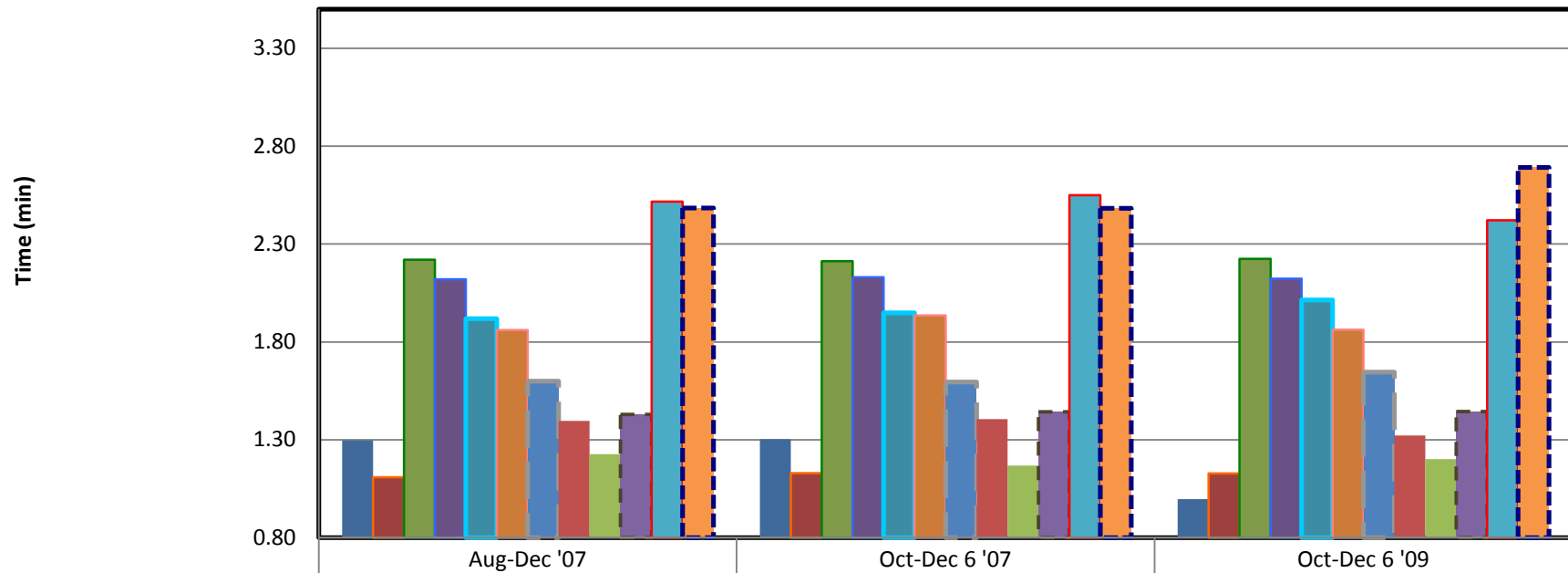
I-44 East of I-270	125,057	124,434	137,944
I-55 South of Union Rd	96,447	96,559	93,295
I-170 North of Page Ave	107,862	108,764	120,793
MO 370 West of Taussig Ave	61,167	60,217	64,995
I-70 East of Airfield Dr	118,242	113,362	107,434
I-270 At Ladue	210,012	210,335	181,896
I-44 West of Mississippi Ave	92,641	93,130	92,577
I-55 South of Broadway	101,093	101,336	100,910
I-70 East of Adelaide	119,620	119,863	121,018

Freeway Speed at Selected Sites



I-44 EB West of S Elm Ave	49.5	49.3	64.4
I-44 WB East of I-270	57.9	56.8	56.9
I-55 SB South of Union Rd	55.9	56.1	55.8
I-55 NB South of Union Rd	58.6	58.3	58.5
I-170 NB North of Page Ave	61.3	60.3	58.4
I-170 SB North of Page Ave	63.2	60.8	63.1
MO370 EB West of Taussig Ave	56.7	56.8	55.1
MO370 WB West of Taussig Ave	64.9	64.5	68.5
I-70 EB East of Airfield Dr	65.0	68.3	66.4
I-70 WB East of Airfield Dr	55.8	55.3	55.2
I-270 NB At Ladue	55.5	54.8	57.7
I-270 SB At Ladue	56.3	56.3	52.0
I-44 EB West of Mississippi Ave	57.3	57.7	57.5

Travel Time along Selected Sections



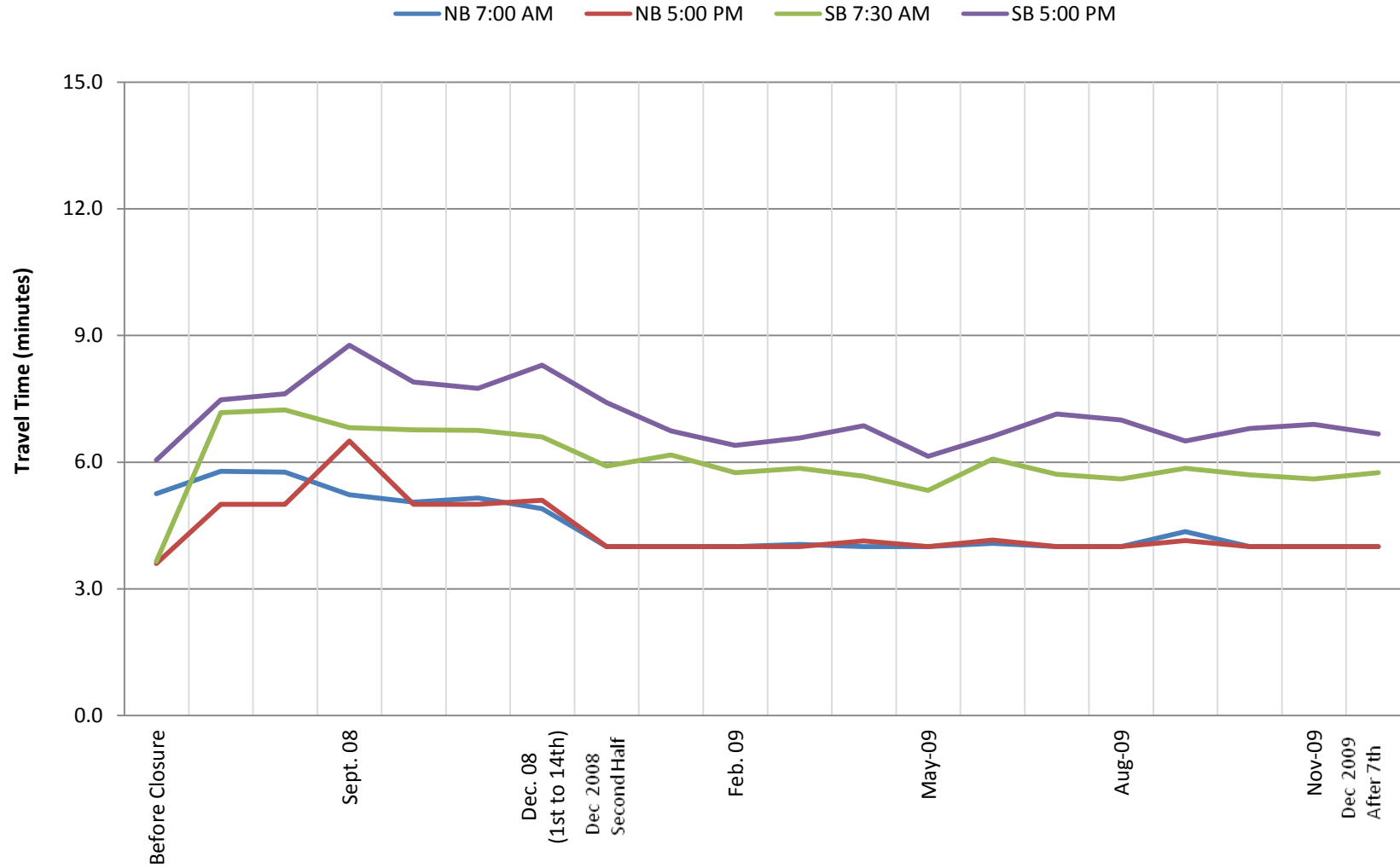
	Aug-Dec '07	Oct-Dec 6 '07	Oct-Dec 6 '09
I-44 EB East of I-270	1.30	1.30	1.00
I-44 WB East of I-270	1.11	1.13	1.13
I-55 SB South of Union Rd	2.22	2.21	2.22
I-55 NB South of Union Rd	2.12	2.13	2.12
I-170 NB North of Page Ave	1.92	1.95	2.01
I-170 SB North of Page Ave	1.86	1.93	1.86
MO370 EB West of Taussig Ave	1.60	1.60	1.65
MO370 WB West of Taussig Ave	1.40	1.41	1.32
I-70 EB East of Airfield Dr	1.23	1.17	1.20
I-70 WB East of Airfield Dr	1.43	1.44	1.44
I-270 NB At Ladue	2.52	2.55	2.42
I-270 SB At Ladue	2.48	2.48	2.69

Arterials

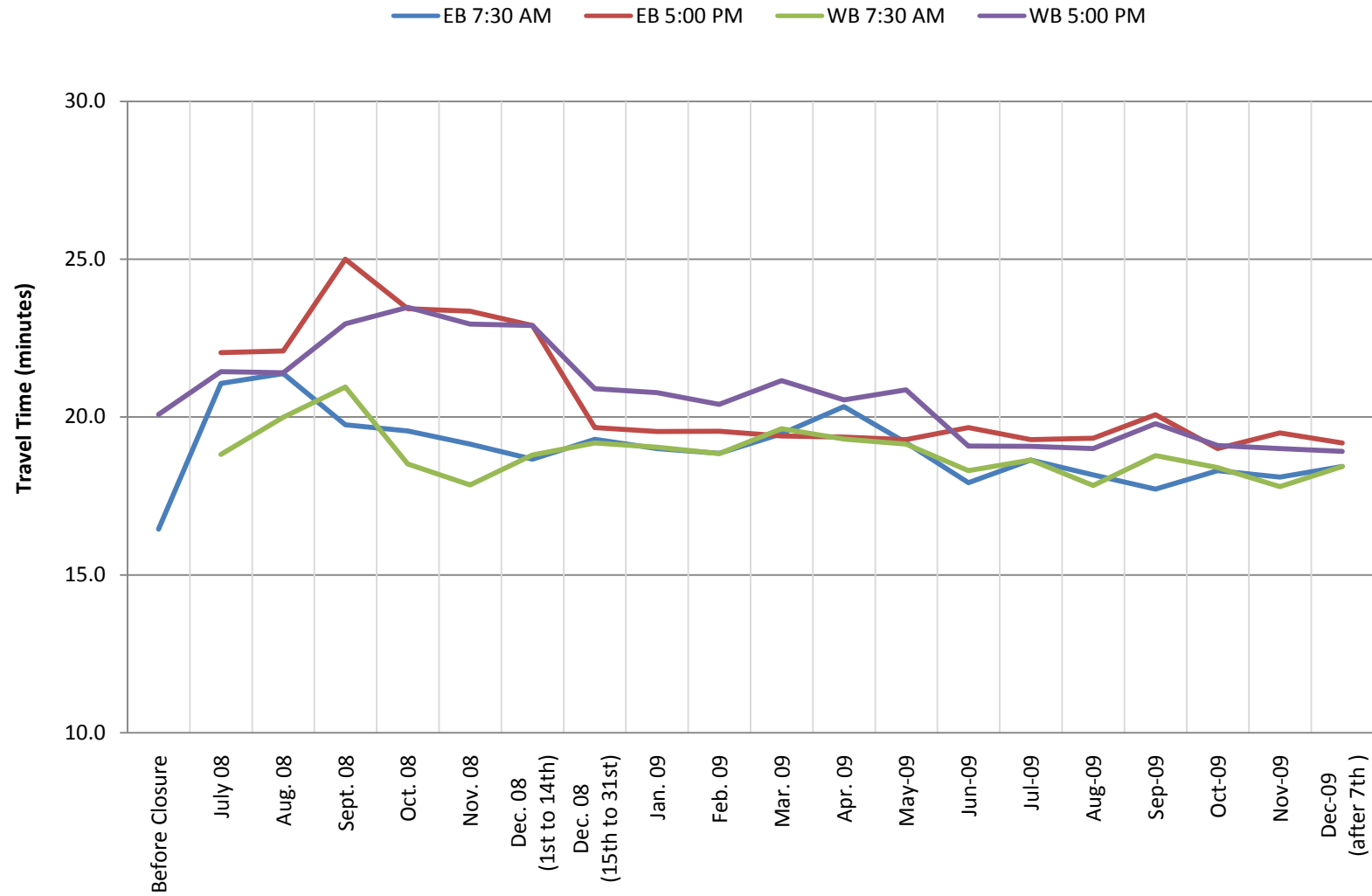
The study team continued to notice a slight increase in travel times along the two corridors being monitored during weekday peak periods. These corridors are major arterials and should provide an indicator of travel along the arterials near the I-64 construction project. The following is a table with average weekday peak periods travel times and their corresponding graphs:

Route	Segment	Direction	Peak Period	Travel Time (Min)																			
				Before Closure	July 08	Aug. 08	Sept. 08	Oct. 08	Nov. 08	Dec. 08 (1st to 14th)	Dec. 08 (15th to 31st)	Jan. 09	Feb. 09	Mar. 09	Apr. 09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09 (after 7 th)
US 61/67	100 to I-64	NB	7:00 AM	5.3	5.8	5.8	5.2	5.1	5.2	4.9	4.0	4.0	4.0	4.1	4.0	4.0	4.1	4.0	4.0	4.4	4.0	4.0	4.0
			5:00 PM	3.6	5.0	5.0	6.5	5.0	5.0	5.1	4.0	4.0	4.0	4.1	4.0	4.2	4.0	4.0	4.1	4.0	4.0	4.0	
		SB	7:30 AM	3.7	7.2	7.2	6.8	6.8	6.8	6.6	5.9	6.2	5.8	5.9	5.7	5.3	6.1	5.7	5.6	5.9	5.7	5.6	5.8
			5:00 PM	6.1	7.5	7.6	8.8	7.9	7.8	8.3	7.4	6.7	6.4	6.6	6.9	6.1	6.6	7.1	7.0	6.5	6.8	6.9	6.7
100	Barrett to Hanely	EB	7:30 AM	16.5	21.1	21.4	19.8	19.6	19.2	18.7	19.3	19.0	18.9	19.5	20.3	19.2	17.9	18.6	18.2	17.7	18.3	18.1	18.4
			5:00 PM	--	22.0	22.1	25.0	23.4	23.4	22.9	19.7	19.5	19.6	19.4	19.4	19.3	19.7	19.3	19.3	20.1	19.0	19.5	19.2
		WB	7:30 AM	--	18.8	20.0	21.0	18.5	17.9	18.8	19.2	19.0	18.9	19.6	19.3	19.1	18.3	18.6	17.8	18.8	18.4	17.8	18.4
			5:00 PM	20.1	21.4	21.4	23.0	23.5	23.0	22.9	20.9	20.8	20.4	21.2	20.5	20.9	19.1	19.1	19.0	19.8	19.1	19.0	18.9
MO141	I-44 to I-64	NB	7:00 AM	11.7	12.6	14.2	15.0	12.7	13.0	13.4	13.0	13.3	13.6	13.4	13.3	12.7	13.0	12.7	14.2	13.4	12.8	12.8	12.9
			5:00 PM	--	12.8	12.9	13.0	12.9	13.5	14.6	17.2	13.1	13.3	13.4	12.8	12.6	12.7	13.1	12.7	12.9	15.4	12.4	13.4
		SB	7:00 AM	--	11.1	11.5	12.7	11.6	10.3	10.7	11.9	12.1	12.4	11.7	12.1	11.8	11.9	12.2	11.8	11.6	11.4	11.8	11.7
			5:00 PM	14.0	11.7	12.4	14.8	13.2	13.1	13.0	16.1	15.0	15.1	15.2	15.4	14.9	14.1	15.1	14.5	14.3	14.9	14.8	14.6
D (Page)	I-270 to I-170	EB	7:30 AM	9.8	9.1	10.1	7.6	8.2	8.1	8.4	8.3	7.9	7.9	7.6	7.6	7.7	8.3	9.5	8.0	8.4	8.0	7.9	7.9
			5:00 PM	--	8.7	10.1	9.3	8.9	9.3	8.8	9.4	9.0	9.0	8.6	9.6	9.3	8.8	8.7	9.0	8.9	8.6	9.3	8.8
		WB	7:30 AM	--	11.3	11.7	8.6	7.6	7.9	7.8	7.4	7.2	7.0	7.0	9.0	8.9	8.8	9.3	8.5	8.6	8.6	8.6	8.8
			5:00 PM	10.6	11.2	11.6	8.5	8.7	8.4	8.9	9.3	8.0	7.9	8.0	9.2	9.7	9.7	9.9	11.4	9.6	10.7	9.6	10.0
D (Page)	I-170 to Grand Ave.	EB	7:30 AM	--									17.0	17.2	17.9	17.9	17.9	18.3	18.8	18.4	18.8	18.5	18.5
			5:00 PM	--									19.4	19.4	20.1	19.6	20.0	19.9	17.0	18.9	19.2	20.8	20.5
		WB	7:30 AM	--										20.8	20.0	19.5	20.5	20.0	19.4	20.6	20.9	21.1	21.0
			5:00 PM	--										19.1	18.5	19.0	18.4	18.2	18.3	18.7	19.8	18.7	18.7

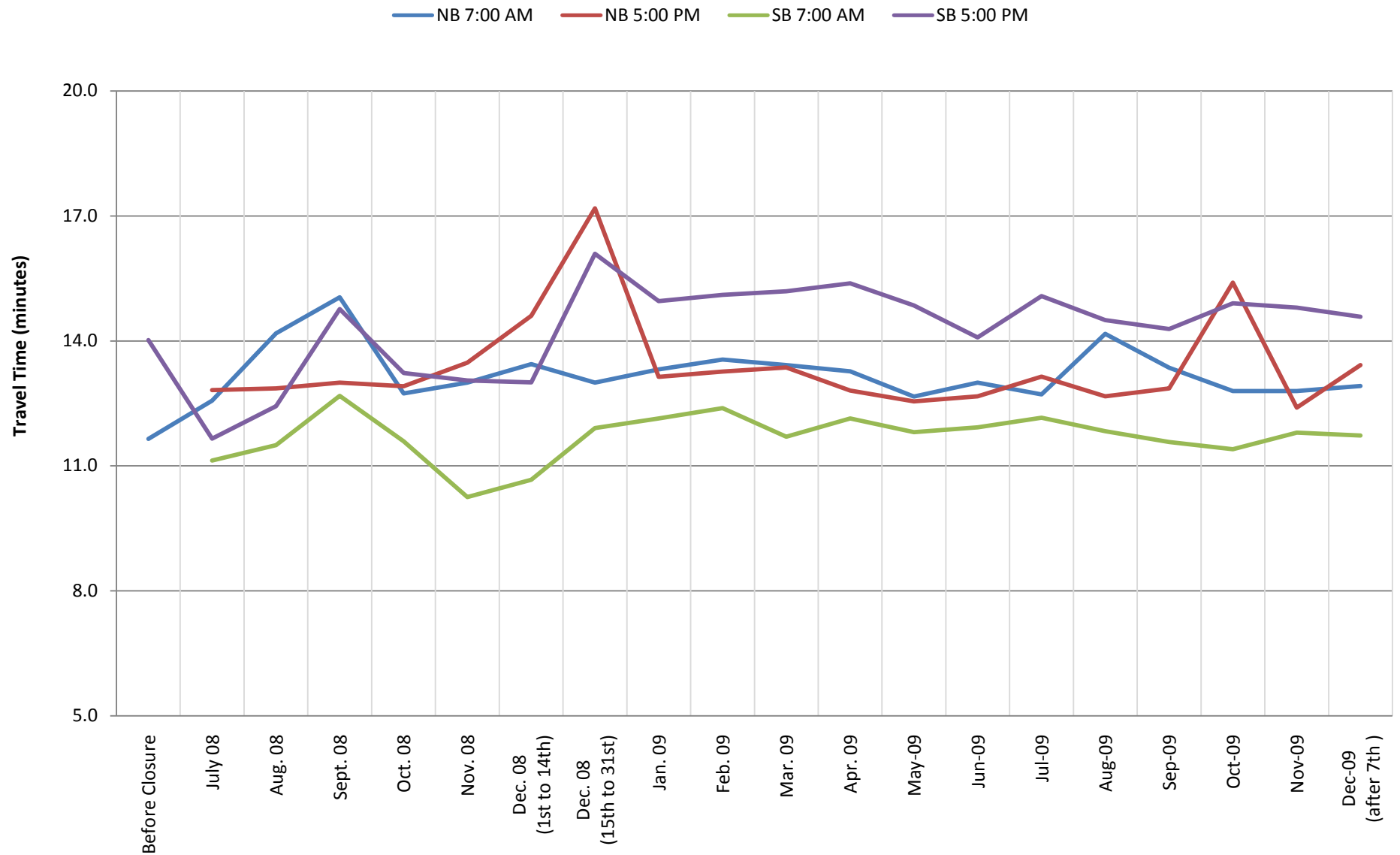
Routes US61/67 - Route 100 to I-64



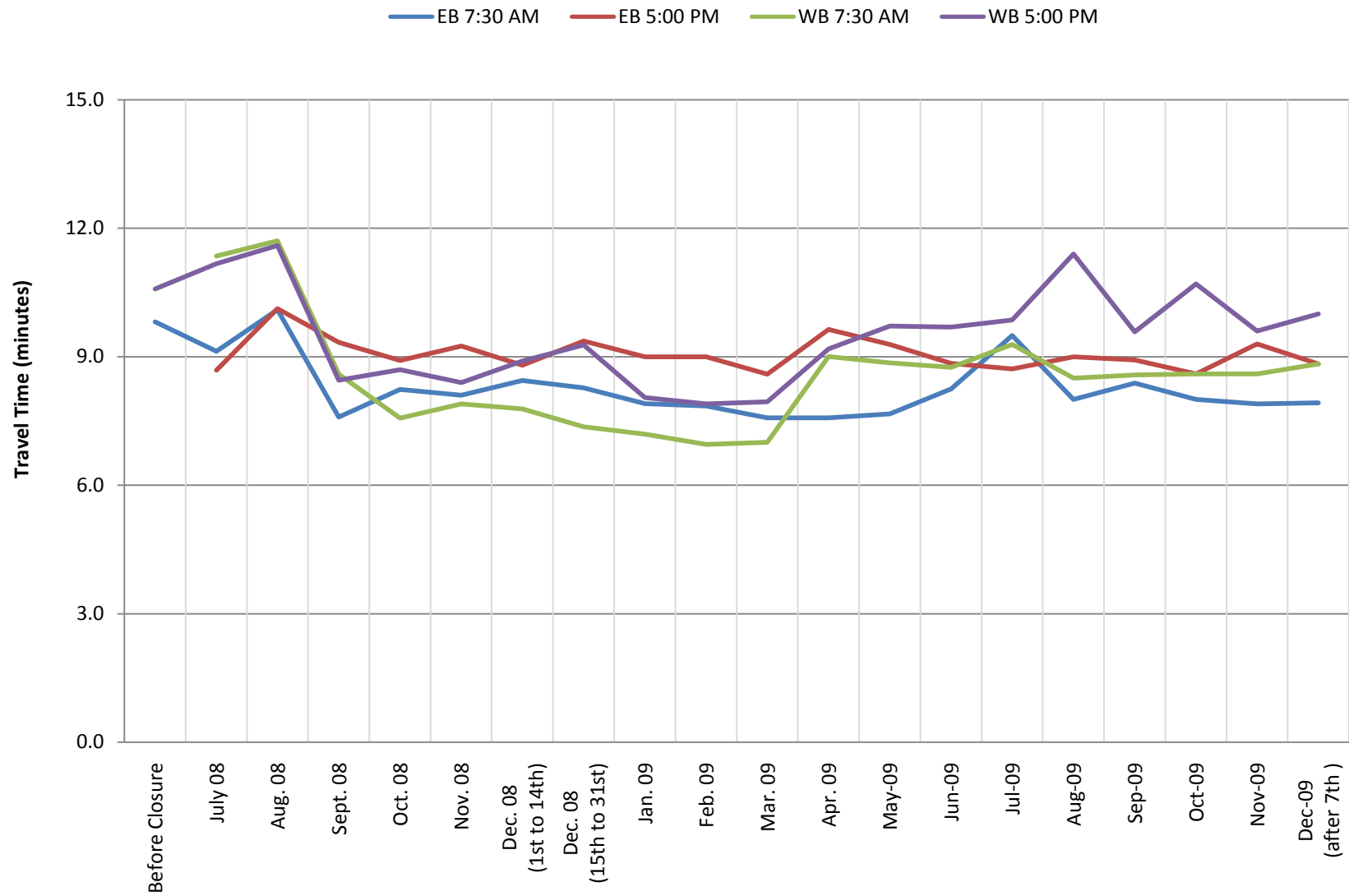
Route 100 - Barrett to Hanley



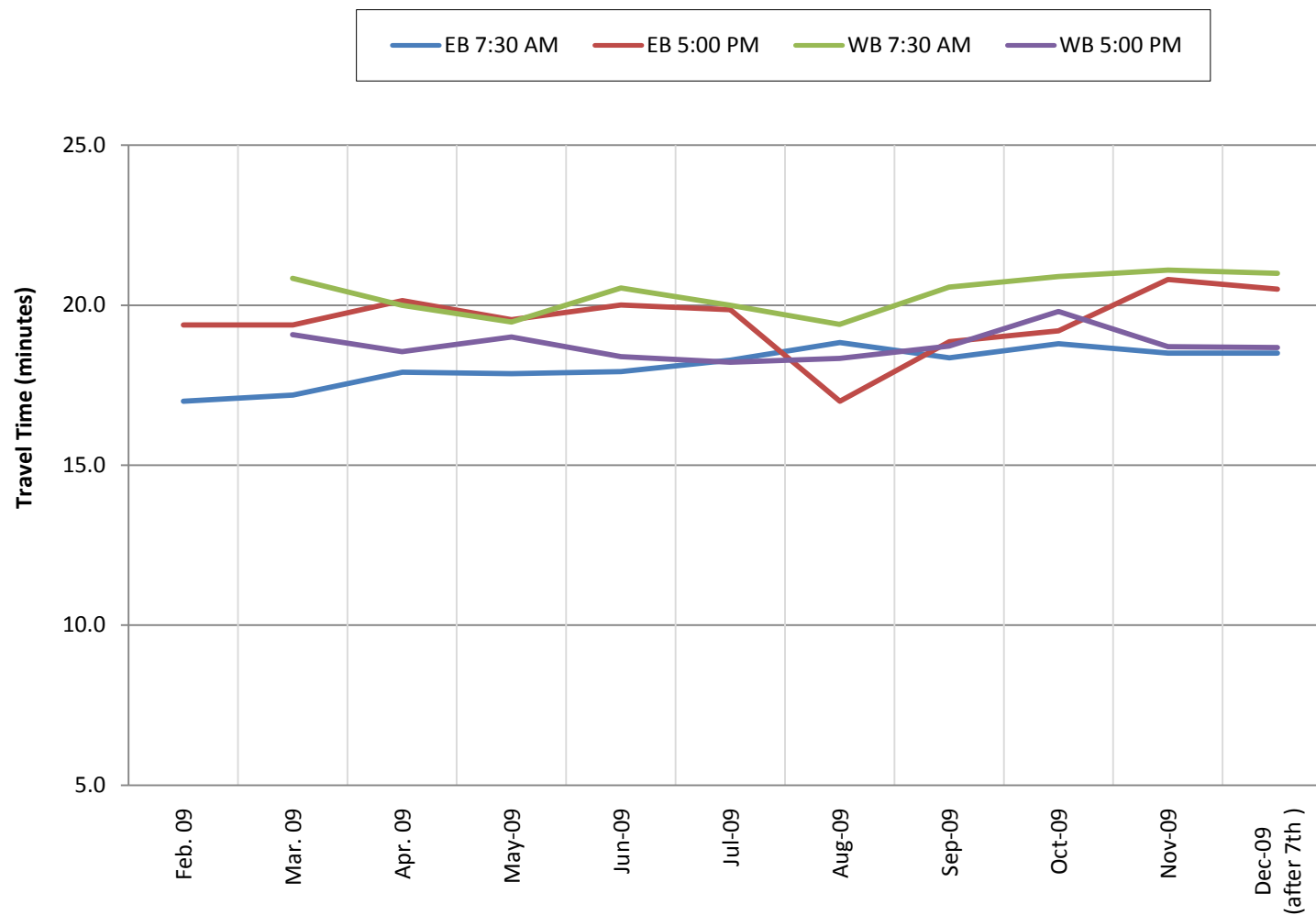
Route 141 - I-44 to I-64



Route D (Page) - I-270 to I-170

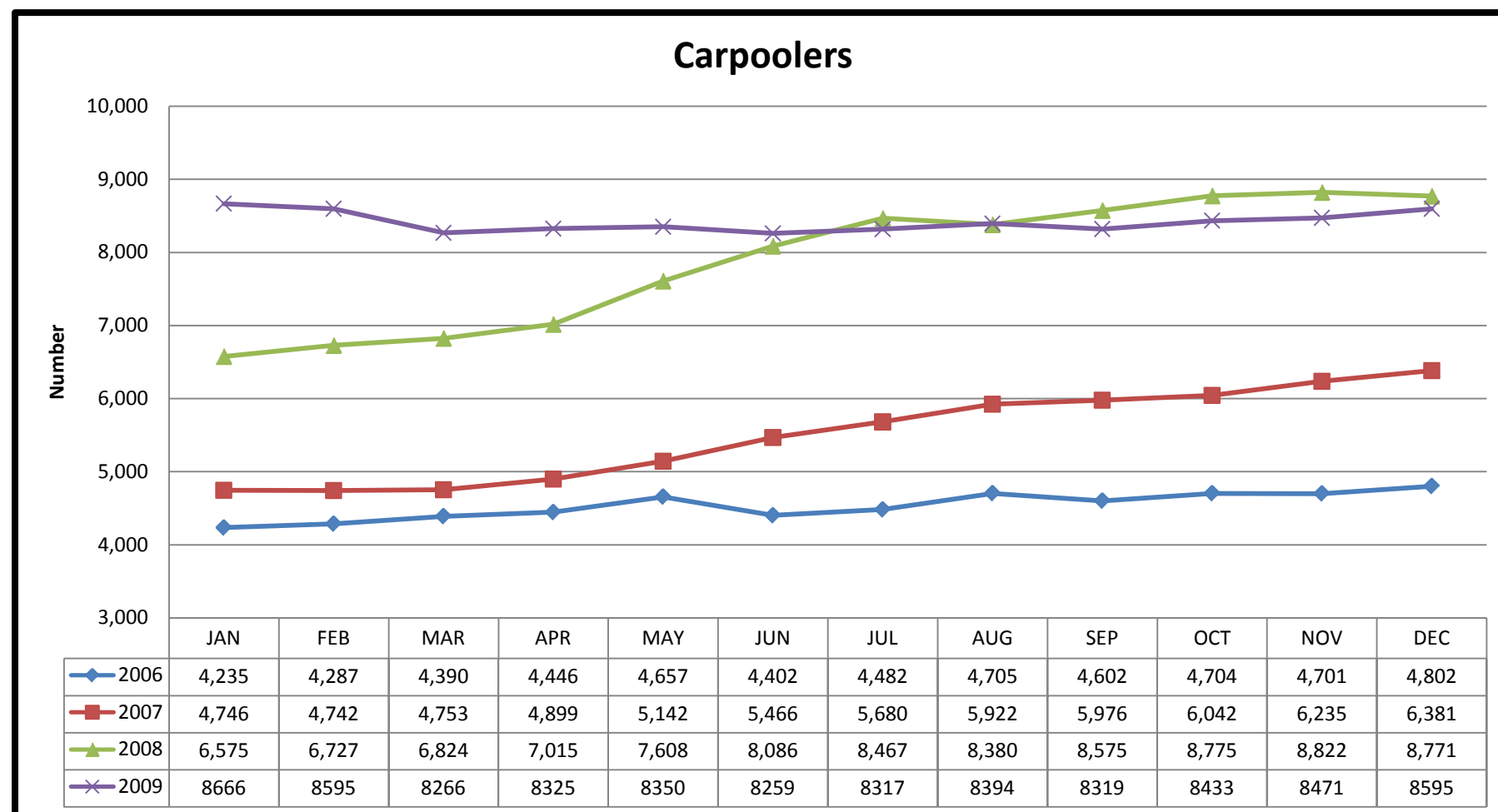


Route D (Page) - I-170 to Grand

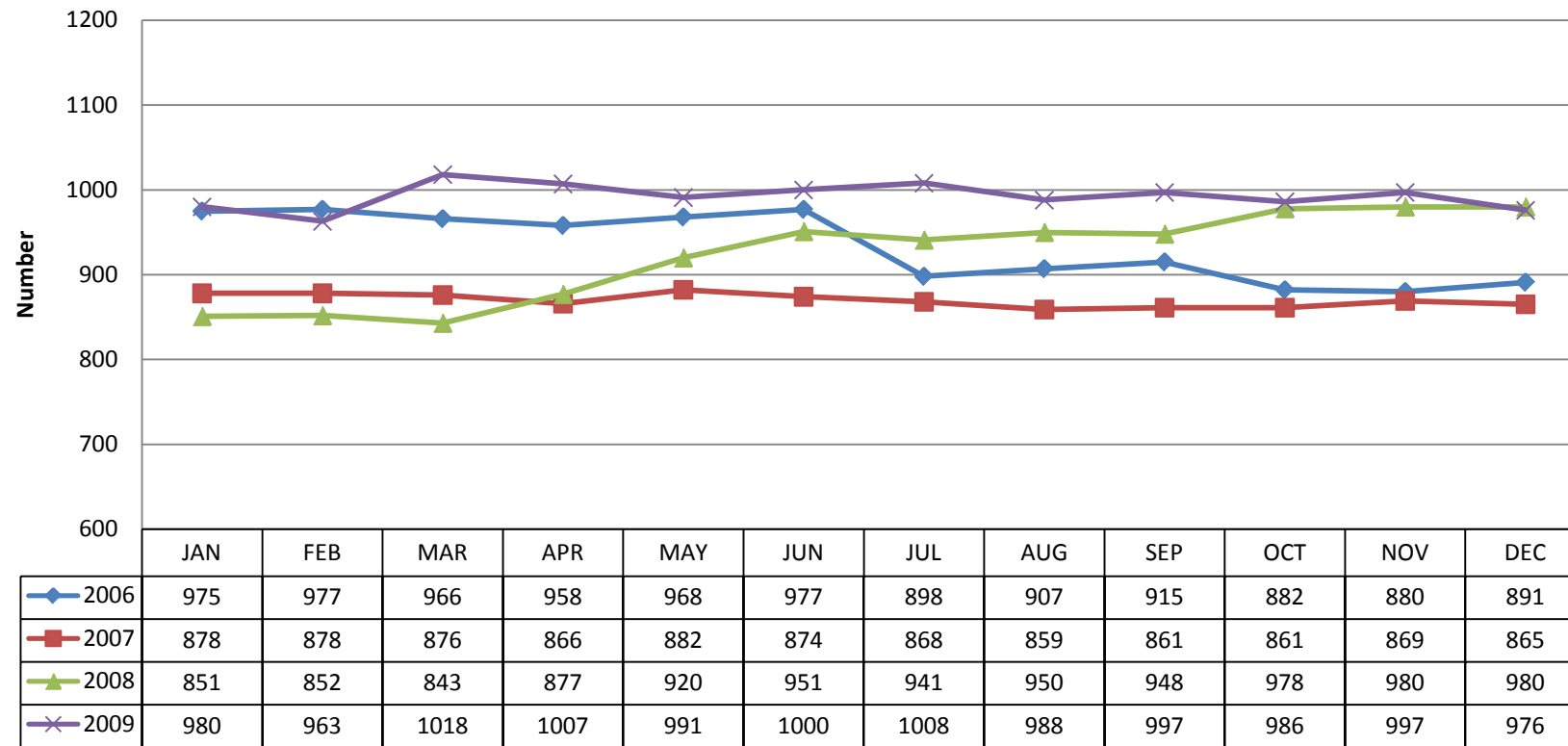


Rideshare

Regional utilization information from Rideshare shows a somewhat stable pattern for both carpooling and vanpooling during this quarter. Carpooling in 2008 and 2009 continues to show a significant increase over base years of 2006 and 2007. Vanpooling has fluctuated over the 3 plus years of evaluation with a low 843 vanpoolers in 2008 and a high of 1,018 in 2009. The usage of these regional services can be related to several factors including major roadway construction, economy and higher gas prices. As the study team moves towards the final report, we will use this information along with public survey, economic and other mobility information to assess what role it plays in improving regional mobility. The following tables and graphs provide a summary of information for carpooling and vanpooling.



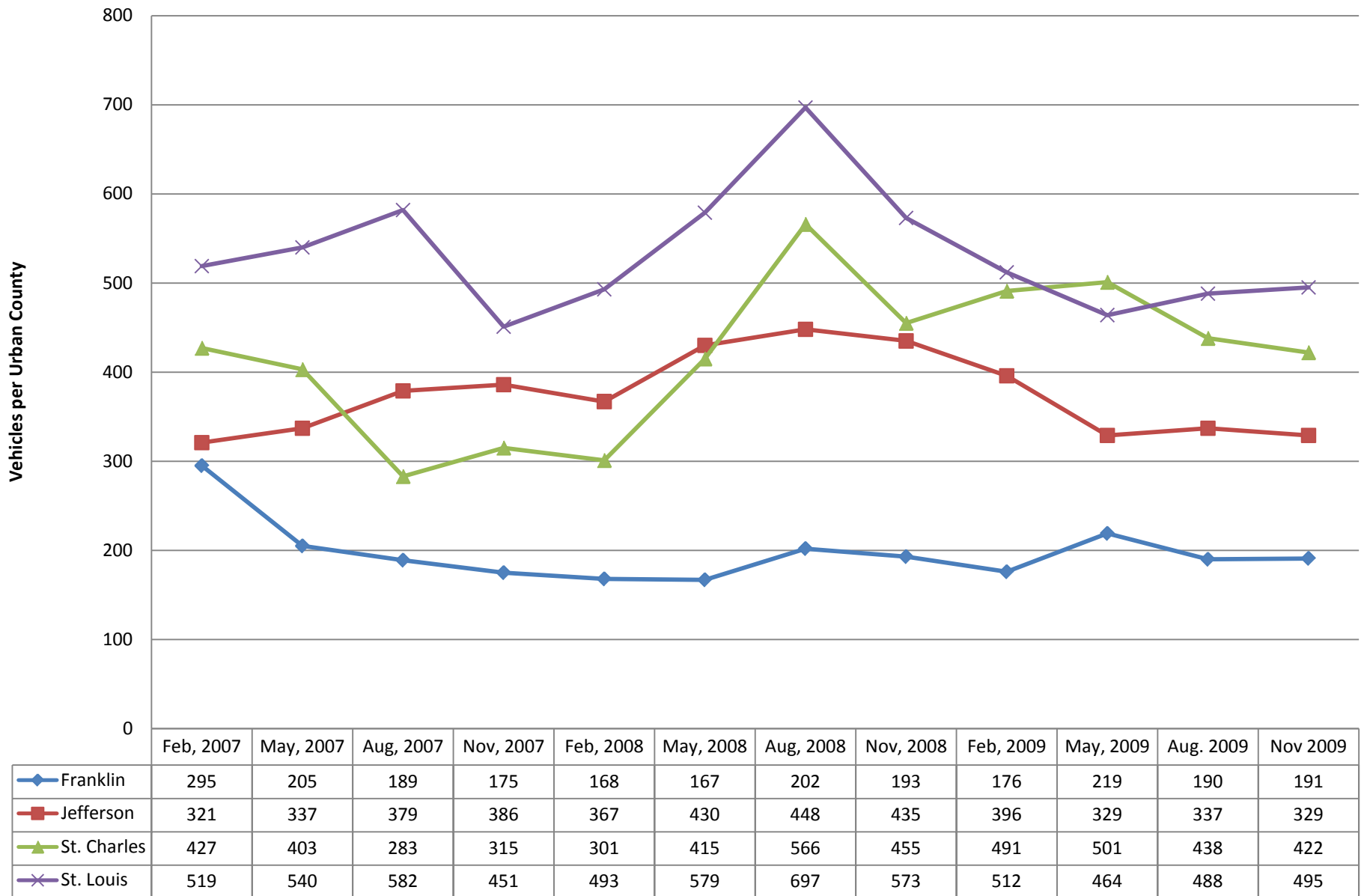
Vanpoolers



Park and Ride

Regional utilization information from MoDOT's 35 Urban Area Park and Ride lots show a peak usage in August of 2008 with declining usage trend by urban-area Counties since this peak. November 2009 was down 25% in usage when compared to the peak usage in August 2008. Decline in usage in Jefferson, St. Charles and St. Louis Counties have been significant (25 to 29%) while Franklin County has been fairly stable. Factors mentioned in the Rideshare section can also apply to the changes in public use of these park and ride facilities. These factors will be assessed in a similar manner as the final report is developed. The following table and graph includes usage from the first quarter in 2007 through the present.

MoDOT Park-and-Ride Usage



4. Economics

Economics Highlights

The collection, analysis, and tracking of economic data and financial indicators were the focus of this quarter's work effort. To date, MERIC has provided HDR with economic data from the first quarter 2006 through the second quarter of 2009. In addition, taxable sales data has been compiled up to and including the third-quarter of 2009. Because there is a time lag in available economic, real estate, and fiscal data, this quarterly report will only focus on the currently available and collected data.

Economic Analysis Progress

Current activities to date include:

- Collection of the identified and published economic and fiscal data.
- Receipt of ZIP-code-level data from MERIC for the second quarter of 2009. The economic data includes: industry employment, wage, and establishment data tabulations.
- Analysis of first and third quarter 2009 Taxable Sales Data from Missouri Department of Revenue (DOR).

Economic Analysis

The major economic information for the I-64 corridor and non-corridor regions of St. Louis City and County for the second quarter of each year from 2007 through 2009 is displayed in Table 1. As there typically is seasonal variation throughout the year, the table below compares the second quarters of each year. The second quarter of 2009 shows employment for the non-corridor has dipped below 2007 levels. Comparing the second quarter of 2008 with the second quarter of 2009 indicates that both regions combined experienced a loss of 44,708 jobs and \$847 million in wages. As in previous quarters, the decline in employment, wages, and taxable sales has been greater, in terms of value and percentage, for the non-corridor region than the corridor region.

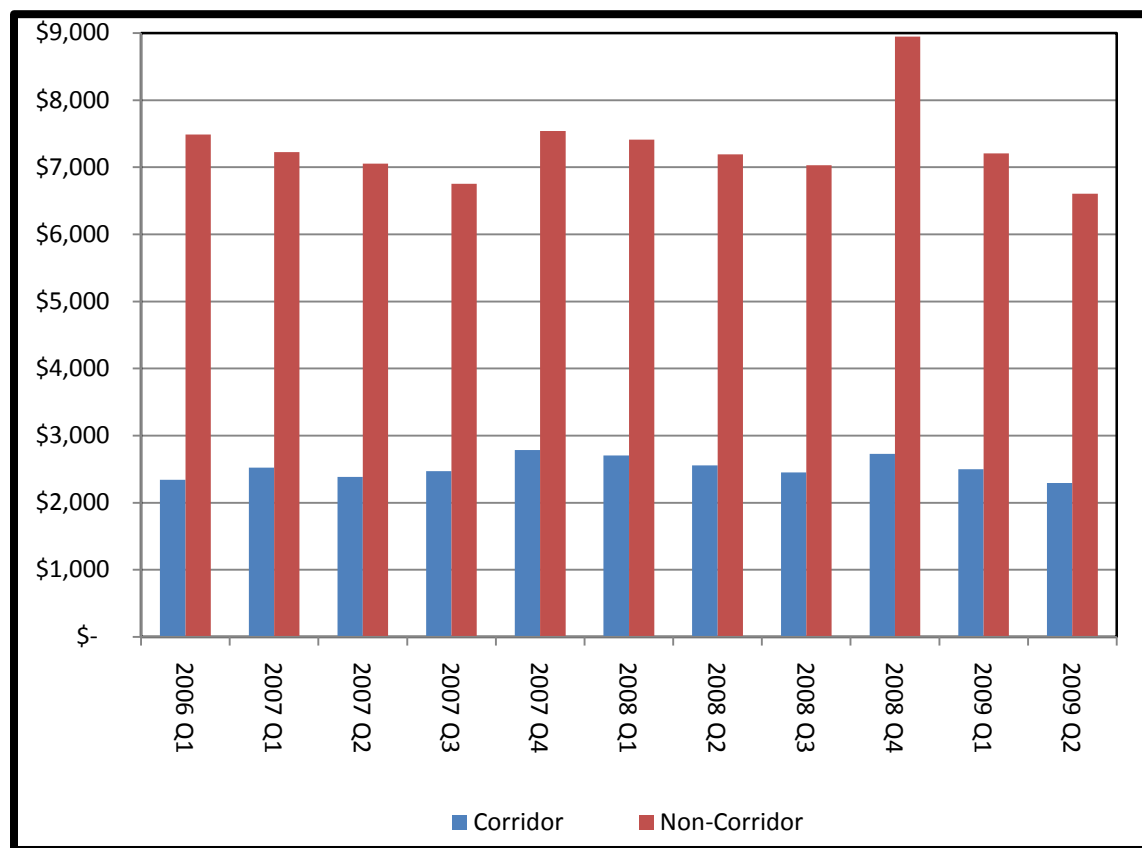
Table 1: St. Louis I-64 Corridor and Non-Corridor Economic Profile: Second Quarter of Each Year

	2nd Quarter 2007		2nd Quarter 2008		2nd Quarter 2009	
	Corridor	Non-Corridor	Corridor	Non-Corridor	Corridor	Non-Corridor
Jobs	201,778	636,941	201,577	631,271	191,098	597,042
# of Establishments	9,482	31,426	9,197	31,131	9,005	30,814
Wages (\$ Millions)	\$ 2,385	\$ 7,055	\$ 2,555	\$ 7,193	\$ 2,293	\$ 6,608
Taxable Sales (\$ Millions)	\$ 950	\$ 4,315	\$ 914	\$ 4,226	\$ 811	\$ 3,859

Source: MERIC and Missouri Department of Revenue

As displayed in Figure 1, the corridor region generates 26 percent of the total wages of the entire region; total wages for the first quarter of 2009 were \$2.5 billion, which then dropped to \$2.3 billion in the second quarter of 2009. The much larger non-corridor region generated \$7.2 billion in wages in the first quarter of 2009, but has since declined to \$6.6 billion in the second quarter of 2009. These dips are consistent with seasonal trends in the wage data for the previous years, where the wages declined from the first quarter through the third quarter of the year and then recovered in the fourth quarter. However, wages have declined below 2006 levels for both regions, suggesting that although these swings from quarter to quarter follow seasonal patterns, the impacts were more severe.

Figure 1: Total Quarterly Wages by Region in Millions of dollars¹



Source: MERIC QCEW

Employment trends on an industry basis are described below for the entire region including St. Louis County and City.

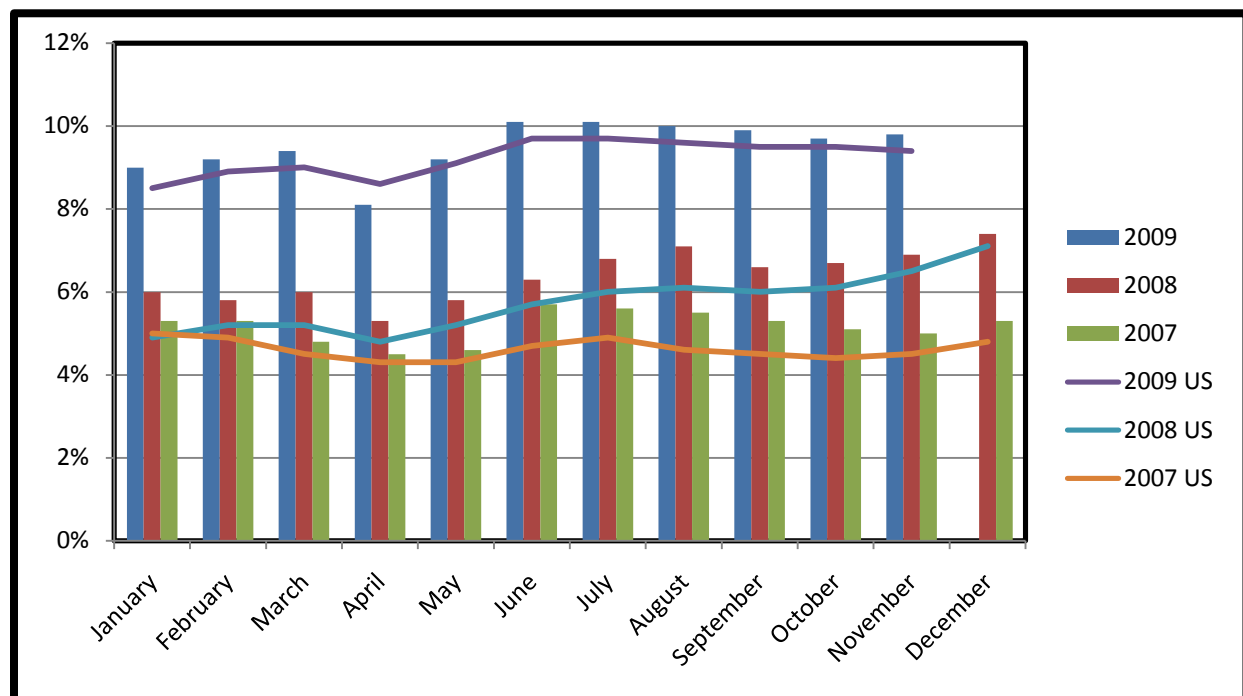
- Management and administration jobs peaked in third quarter 2008 at 90,018 jobs, but since have declined to 77,447 jobs in the second quarter 2009.
- Retail employment peaked in fourth quarter 2007 with 83,750 jobs, and has since declined with the exception of the fourth quarter of 2008 which coincides with the holiday shopping season. Despite the positive growth at the end of 2008, both quarters of 2009 have shown negative growth with the second quarter reporting 75,374 retail jobs. As expected, wholesale trade is following a similar trend.
- Manufacturing employment has declined in the region significantly since 2006. A year-by-year comparison of the second quarters of 2008 and 2009 shows a decline of 16% or loss of 8,980 jobs.
- Construction industry has experienced a decline coinciding with national trends. Comparisons between the second quarter of 2008 and 2009 show a decline of 18% or loss of 7,937 jobs.

¹ Data provided only includes first quarter of 2006

Unemployment

The total employment for the study area is 788,140, of which 24 percent is concentrated in the corridor region. Traditionally, employment trends for the region show a dip in employment in the first quarter, a small recovery in the second quarter, followed by a small contraction in the 3rd quarter, and a rebound in the fourth quarter. Since the second quarter of 2008, however, total employment for the entire region (corridor and non-corridor) has consistently declined, dropping below 2007 levels. From June 2009 through August 2009, unemployment rates climbed to more than 10% for the St. Louis metro². Figure 2 shows the monthly unemployment trends for the St. Louis, Missouri metropolitan area and the US for January 2007 through November of 2009. The bars in the figure represent the St. Louis metro area, while the lines represent the US. The figure shows that the unemployment rate in St. Louis was below the US in 2008. For most of 2009, however, unemployment in St. Louis has exceeded the nation. For November of 2009, the unemployment rate in St. Louis was 9.8 percent, 0.4 percentage points higher than the US unemployment rate.

Figure 2: Unemployment Rate: St. Louis, MO Metropolitan Area



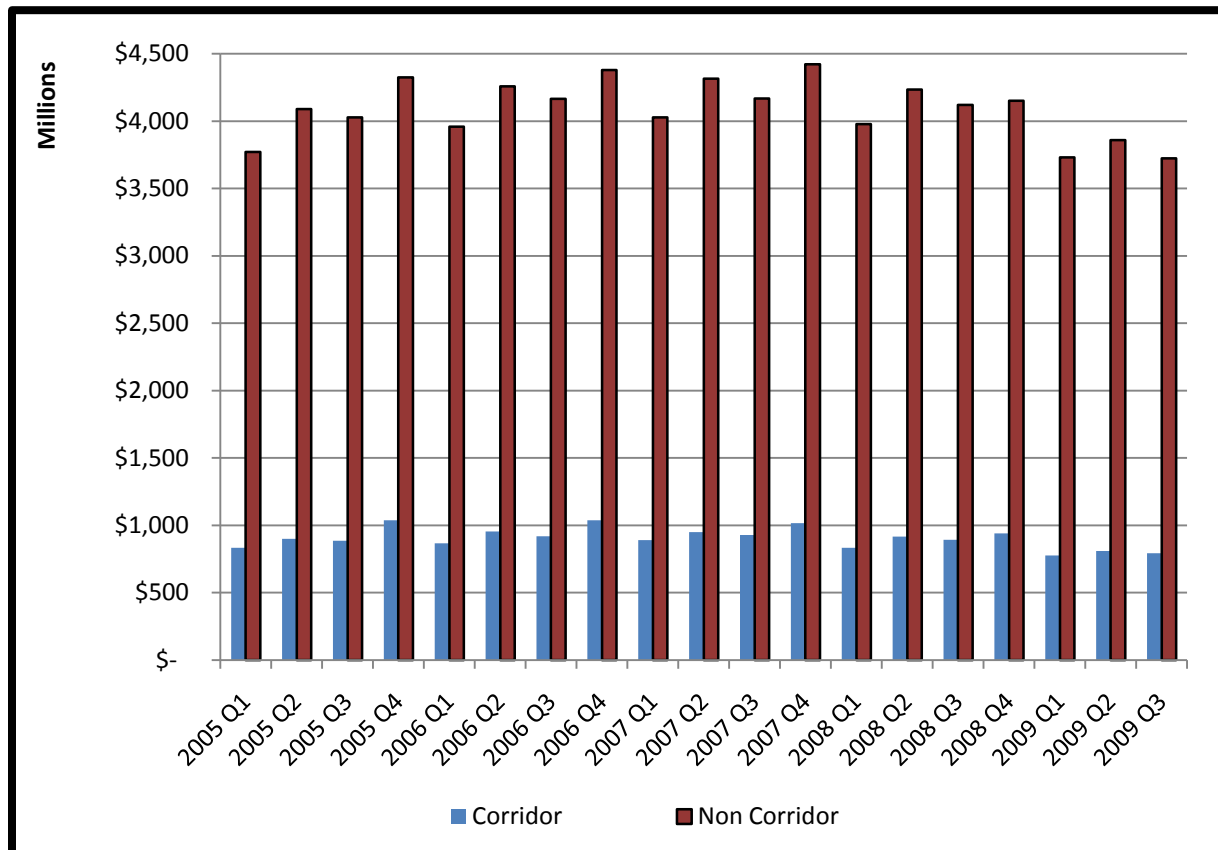
Source: MERIC

Taxable Sales

The combined taxable sales for the City and County of St. Louis were \$4.5 billion for the first quarter of 2009, and analysis of the second quarter 2009 shows total taxable sales increased to a combined total of \$4.67 billion. When compared on a year-by-year basis, the second quarter 2009 taxable sales revenues dropped \$469 million dollars from the second quarter of 2008. Third quarter 2009 taxable sales declined, following wage and employment trends, and falls short of the 2008 third quarter sales. Figure 3 below shows the total taxable sales for each quarter, from first quarter 2005 to third quarter 2009, in millions of dollars. The figure shows that taxable sales have dropped below 2005 levels.

² Missouri Side only

Figure 3: Taxable Sales by Region

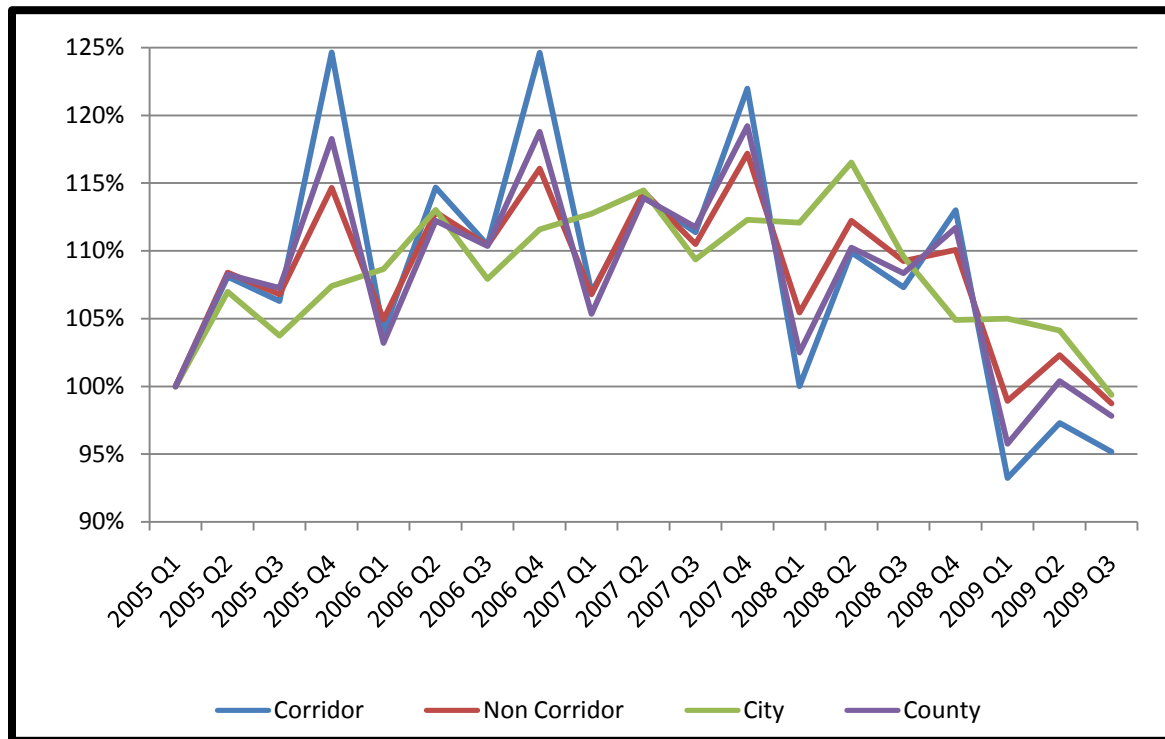


Source: Department of Revenue

The seasonal taxable sales patterns are best reflected in the taxable sales growth index presented in Figure 4. The index demonstrates quarterly taxable sales growth by region in the study area. Each year, sales follow a quarterly cycle where the lowest sales take place in the first quarter of the calendar year. The second and third quarter generally show some degree of recovery, and then the final quarter of the year has the largest sales, which are traditionally boosted by holiday spending.

The region's growth followed a similar seasonal pattern, maintaining an overall level of positive growth until 2007, where the fourth quarter of 2007 growth fell short of the previous years and was followed by a significant drop in taxable sales in first quarter of 2008. Sales did recover during the course of 2008, but they remained below 2006 levels with the exception of the City of St. Louis in the second quarter of 2008. Taxable sales dipped below 2005 levels for the first portion of 2009, showing positive growth in second quarter of 2009, followed by negative growth in the third quarter of 2009.

Figure 4: Taxable Sales Growth Index by Region



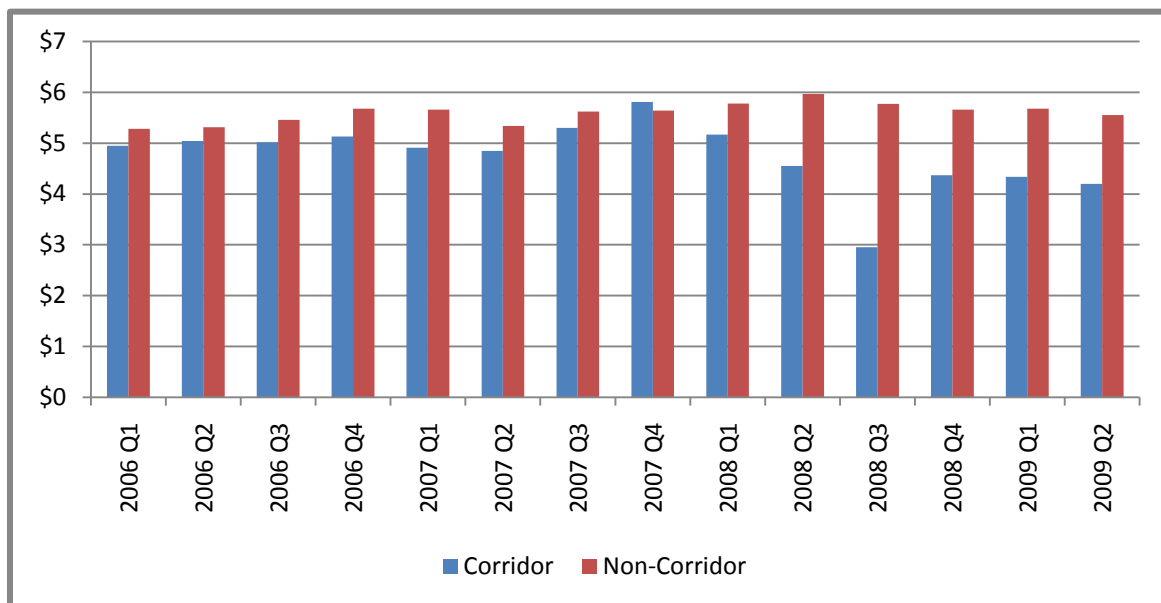
Source: Department of Revenue

Real Estate (Please note that since we have not received our second real estate dataset, we do not have any changes to report for the real estate market from the previous quarterly report)

TWR created a custom real estate database for the corridor and non-corridor regions, as well as the St. Louis metropolitan area. The data, based at the ZIP code level, provides vacancy rates, net and gross asking rent prices, the number of buildings, total stock, completions, net absorption, and availability rates for industrial and office real estate. Since the St. Louis metropolitan real estate market rates are mostly quoted in gross terms, over 95% for vacant office space, this analysis will focus on gross asking rates.

The TWR industrial data for gross asking price per square foot shows the gross asking price for industrial space peaked in the first half of 2008 for the non-corridor, whereas the corridor peaked in the last quarter of 2007, as shown in Figure 5. Industrial stock has not grown in the corridor area since the beginning of 2007, while the non-corridor region is showing a steady annual growth of 0.8% since 2000. In terms of total industrial stock, the non-corridor region has over 6.5 times the amount of industrial stock found in the corridor region. The figure also shows that prior to the second quarter of 2008, gross asking rents between both regions were within \$0.75 per square foot for industrial space, but following the second quarter of 2008 rates between the two regions widened to a difference of at least \$1.29 per square foot. The variation in prices for the corridor region in 2008 and the first half of 2009 is an indication of greater vacancies that are likely related to the economic downturn.

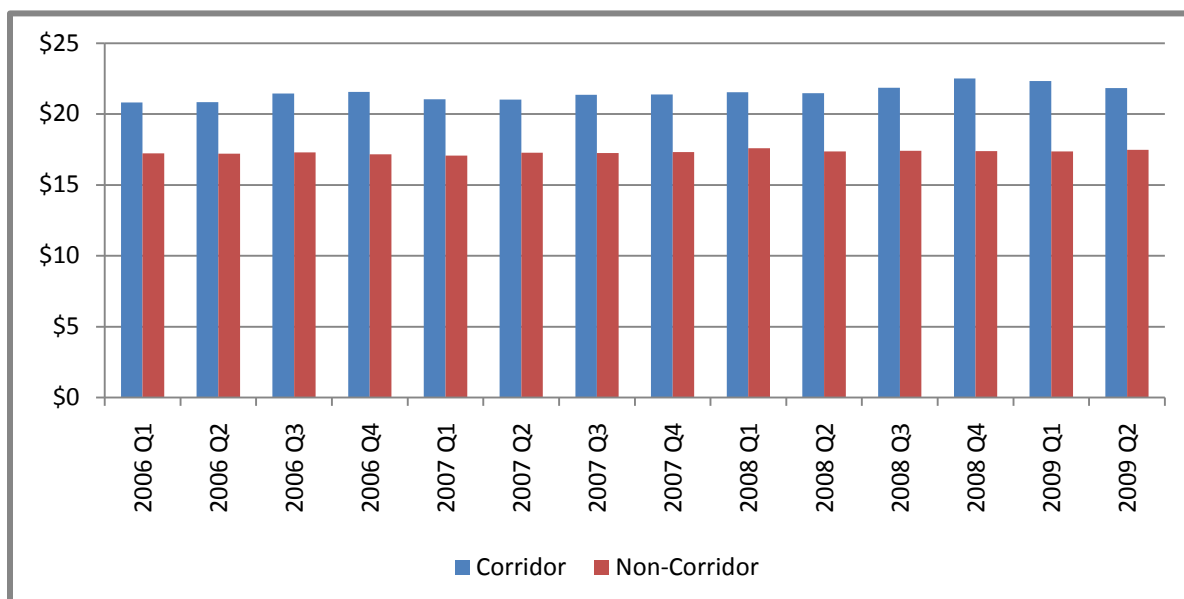
Figure 5: Gross Industrial Asking Rent per square foot



Source: TWR

While the non-corridor region has been established as the leading industrial real estate market, the corridor region is better suited for office real estate. Although the non-corridor region has an additional 10 million square feet of office space, the corridor region has higher asking rents and lower vacancy rates. The gross asking price for office space per square foot for the corridor has shown positive growth through most of 2008, with a slight dip in the second quarter of 2009, whereas the non-corridor office asking rent prices have remained relatively flat with limited variation in asking rents as illustrated in Figure 6.

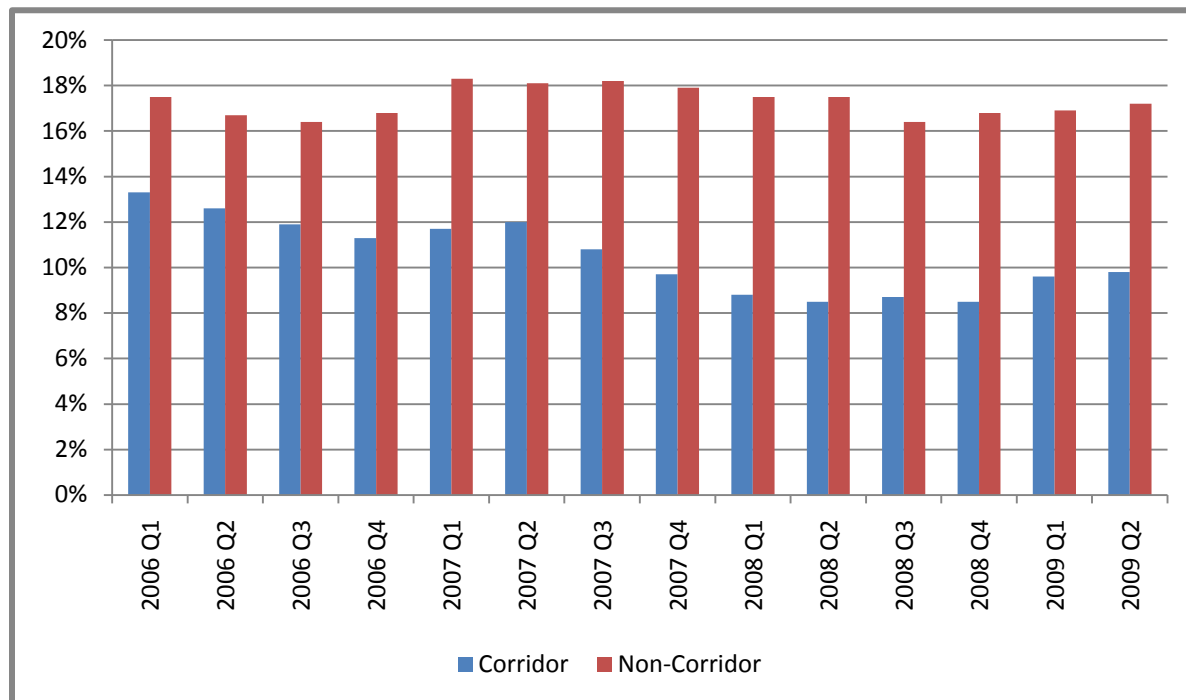
Figure 6: Gross Office Asking Rent per square foot



Source: TWR

In terms of office vacancies, the lowest office vacancy rates for both regions occurred during the middle of 2008, but began to rise at the end of 2008 through the second quarter of 2009. Since 2007, the corridor region's vacancy rate has been on average 7.7 percentage-points lower than the non-corridor region, as seen in Figure 7. The lower gross asking rents for office space are likely impacting the overall vacancy rates within both regions as they have not gone above first quarter 2006 levels.

Figure 7: Quarterly Office Space Vacancy Rates by Region



Source: TWR

Conclusions and Future Steps

Thus far, it is difficult to isolate the impacts of I-64 on the St. Louis economy from the larger national economic conditions. Additional analysis of the remaining 2009 economic, real estate, and fiscal data will help assess the implications of the I-64 closure and the overall economic health of the region. This information will be available in the annual report. In addition a third business survey has been developed and is scheduled for release in late January. The results of the survey will help ascertain how local businesses were impacted during the eastern closure of I-64 and after the reopening.

The assessment of economic cost attributable to changes in traffic, travel delay, and vehicle miles traveled (VMT) due to the western closure of I-64 will begin as additional data becomes available. The data and analysis in subsequent quarters will provide a better understanding of the magnitude of the transportation costs and their impact on productivity and competitiveness. Further analysis will offer insight on the project's effect on retail sales, customers and visitors, particularly among Corridor businesses. Finally, it will help to ascertain the extent to which national economic conditions are influencing the results.

Appendix A: Communications Data

- Online Survey Summary
- Online Responses

Summary of Online Comments to Eastern Closure

Version FY10Q2

January 13, 2010

Respondents were given multiple opportunities to provide comments in the online survey. Each opportunity corresponded to a different part of the survey.

The comments in black were previously released in previous supplements. [The comments in blue are the most recent comments](#). They have been received since the last report was generated.

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Impact of Closure Comments

The following comments were left in response to the statement *If you want to provide more details about how the closure has affected you, please do so here.* The comments are presented as they were received.

The simultaineous closure of Big Bend with Hanley did make McCausland bujsier

the closure has increased my travel time from 35 minutes before the closure to 60-90 minutes after the closure. The closure of the martin luther king bridge has really affected my commute time to over two hours one way on some days.

I'm in sales so it is a bigger inconvenience than if I went to the same place every day.

The path to get onto 170 and 40 from hanley used to be easy, but now it involves very packed 1 lane roads, left turns across heavy traffic and most of the time cars stopped for long periods in intersections because of parking lot stop signs that traffic is detoured through

I have adapted by trying slightly different routes. In addition, shifting my commute 10-15 minutes, earlier or later, sometimes seems to have an effect.

My life is in ruin because of this.

Even though I leave earlier, I am still routinely late for work EVERY DAY, especially during the portion of time when the Hanley and Big Bend bridges were closed. That was insane. I feel as though this whole project wasn't necessarily needed, and causes more headaches than good.

As a bicycle commuter, you short-sighted project has made my commute more life threatening. The very people you are trying to appease (to the exclusion of all others) almost daily threaten my life with their thoughtless driving habits.

My primary route to work from St. Charles to downtown St. Louis is I-70. However, I would routinely use I-64 as an alternate route if there were delays or accidents on I-70. The closure has been somewhat of an inconvenience since I no longer have a good alternate route available.

much traffic, longer waits at lights and stop signs

This closure impacted me A LOT more than once a day.

My commute time has double.

Both closures have had very little effect on my travel experience and while I do not travel the I64 corridor during the rush hour I do use I270. My job requires that I travel all over the St. Louis area during the day and I simply have not had any problems. I was among the skeptics when this all started and never dreamed it could run so smooth. I think that the entire project was very well planned. Modot and all the contractors deserve recognition for a job very well done.

I live in the city (St. Louis Hills) and work in the county, (Olivette). This has cost me 30-40 minutes a day travel time, which is not a huge deal. It has cost friends of mine their businesses and I hope the sons of bitches who make all the money off this pay those people back. If not, I hope the greedy bastards family members die in firey crashes on I-64.

Actually the Western closure affected me more, BUT I was pleasantly suprised on the lack of congestion there was. Thanks,

I only do leave a little early cause of the people taking the round way round this. Do not know how to get off the Poplar street bridge and stay in there lanes. Maybe someone needs to look at this bridge and #1 tell II. to get the signs right. 70 is the lane for 64. 44 is the lane for 70 and 64 is marked for 70. That gets truckers confused then the cars do not stay in there lane. Maybe look into no passing lanes?????

I grew up in West St. Louis County, moved to Central Florida in 1991. I drove Highway Farty many, many times in my life. I am visitng family while on business here. I just drove from the Olive/Clarkson Road entrance in Chesterfield to the Barnes Hospital complex justoff Kingshighway. The only improvement I can see to the Highway Farty improvements is that you improved getting on, or off, but did not improve the space available. The travel time from West St. Louis County to the western edge of the city is still relatively the same. So, while a person is on the road, he/she/they will still find travel time and congestion relatively the same. I think MoDot might have missed the boat . . . What has always been needed to Hwy Farty was at least 2 more lanes/direction.

I am fortunate enough to have been able to switch to Metro for my commuting needs.

I have not gone to a baseball game in two years and I have avoided downtown along with everything else in the area of the work

Going from IL to MO was great during the shutdown of traffic. Now that it is open it is horrible going from STL back to IL at night!!! There is too much traffic at all bunched up from the PSB back to boyle its miserable going home at night now after being spoiled for the past 2 years!!!

I don't understand why the Big Bend overpass was closed before the Hanley overpass was re-opened. This has caused a MAJOR upset in my morning commute!

living at Hanley Rd in Clayton, I have been hit by both closures - - especially the closure of the Hanley Rd overpass and the failure to open it before closing Big Bend - - I feel trapped north of forty!

The impediments to North-South traffic has affected me more that the closure of I-64.

I work in Clayton and live in South County. I've been able to find alternative routes through the various closings..... until now..... I am very aggravated with both Hanley and Big Bend are closed at the same time. It is one thing to increase your commute 10-15 minutes, but now it is VERY frustrating to make your way through all the closures.... (ie. No right turn on Boland, lane closures on Brentwood by Crate n Barrel). Who ever decided to close 2 major overpasses within the same vicinity at the same time, was not thinking about the community. St. Louisians have been VERY patient through all the Hwy 64/40 construction. I don't feel MODOT is being very considerate of the communities or the drivers who deal with the struggle everyday.

Since MODOT was stupid in closing Hanley and Big Bend at the same time, and closing Boland and other side streets that take you across I64, what took me 15-20 minutes to get home, took me 1.25 hours last night. If the drivers are being inconvenienced why shouldn't the neighborhoods as well? These are public streets that my tax dollars pay for I should be allowed to use them. VERY POOR PLANNING!!!!!!!

It has made my morning commute BETTER, but made my evening commute WORSE.

I avoid try to avoid Forest Park Parkway in both directions from 4 pm to 7 pm because it is a nightmare!

Forest Park Parkway is easy to travel at 7:10 am. Gets a lot busier at 7:20

It has made getting to/from work miserable and I can't wait for the thing to be finished.

The opening of the western half has made my commute much easier... I live in Creve Coeur and work in Maplewood.

I think the planning was very poor in closing both bridges at the same time.

What used to be a 20 minute commute (with traffic) has now at least doubled since you have decided to concurrently close the Hanley and Big Bend overpasses.

The first half was bearable. The second half? Awful! I live in sw city, son in daycare at brentwood and Strassner, I work at hanley and Forsyth in Clayton. It takes me 45 min to get to work and sometimes as long as 1.5 hours to get home! It has taken me an hour or more to get from Forsyth and Hanly to 40 and Brentwood on several occasions. Then Richmond Heights made Boland one way from Clayton!!! Myself and several others have stopped doing business in richmond Heights, they will no longer get sales tax from me, now or in the future.

The closure made the roads in my neighborhood very crowded during rush hour, and I fear that safety for pedestrians and bikers have been compromised. It's frustrating to see that people still drive when they could be using public transportation.

So glad you closed it down and shortened the duration. The SMART thing to do.

I do not take my kids to school anymore. I go to work very early.

I travel from JB Bridge to I40 west to Chesterfield Pkway W. It seems now at I44 & 270, I just slow down, where before I40 was open we would come to a complete stop. On the way home, I travel I40 to Mason, then take the service road to Dougherty Ferry. This has save time for me. Miss most of the congestion. Truefully, I make better time now then when I40 was totally open. Leave about 6:50 am in the morning an return anywhere between 4:30 to 6:00. I hope I have as good a commute when I 40 reopens. Thanks for the improvements.

No Walls Please around Forest Park and the Zoo.

This closure has been a pathetic cruel joke...

I get stuck in traffic on Big Bend, Hanley, Mcausland and Claytonia all of the time. My Fiance lives on Claytonia and parking on her street has been affected due to rerouting traffic. The engineers involved in planning the bridge closures should have not closed Big Bend and Hanley at the same time while reopening the neighborhood bridges in Richmond Heights. The traffic through these residential neighborhoods is overwhelming and a nuisance.

I spend more time sitting at traffic lights than I do actually moving in the car. It's annoying, but I know that it won't be long until the frustration will end. It's doubled the time it takes for my 3.5 mile commute. Relatively small inconvenience.

Overall, I've been pleased how the work has been progressing. However, this week, things changed. The Hanley bridge opened and a portion of the heavily travelled Eager Road was closed. We drive this stretch of road 3 times per day. The detour by the MetroLink works okay except for the stop signs, one of which was just added. Nothing frustrates me more than to sit for 10 minutes to approach a stop sign just to see a green light at Hanley that no cars are crossing b/c they are stuck at the stop sign. The stop signs really should be removed to improve traffic flow.

The opening of Hanley and closing of Eager has been a nightmare. Up to this point, I was hardly affected by the construction at all. Now, I am working on an Island called Meridian. An island with very dangerous traffic patterns for both pedestrians and those in vehicles. And it appears there was not much thought put in to where all of these cars would be going. Hanley over Hwy 40 prior to the construction was mainly used to get to Hwy 170 - not to get from Clayton to Manchester. Now all of that Hwy 170 traffic goes between the Metro garage and the Meridian complex - with no sidewalks for pedestrians and at first no stop signs for the East bound traffic. Someone finally put up on Stop sign and now you have a chance to get your car out of the garage - primarily if you need to go East bound. Those wanting to exit and go Westbound on Dale/Meridian are still taking quite a chance when attempting to "merge" in to traffic

I wouldn't say that the western half is FINISHED. You may have "opened" it last December, but every day there are lane closures, ramp closures, closures of the streets underneath bridges (Lindbergh). It's a mess. To say that the western half of the project was completed on time is an outright lie, and as a taxpayer, I'm offended for any penny you were given as an incentive for having completed it either ON TIME or EARLY.

This closure has got to be one of the most insensitive, worst ideas I have ever encountered. I now have to leave more than 20 or 30 minutes earlier, traffic is always congested, traffic now comes through my once quite neighborhood of Richmond Hts and threatens children in the area including my daughter with a huge amount of drivers rerouted through the area. Workers work all hours of the night with no notice...and they work directly outside my home!

When the western portion was closed, my 3-mile commute to work was 3-4 times longer!

I travel on 1-44 to work and always have. It is more dangerous and frightening to be on the road with such smaller lanes and big trucks. I can not wait to get back the wider lanes. I don't think smaller lanes and adding lanes has helped traffic at all on 1-44. I drive slower and will lane change to get out of the next lane to a big truck or I will slow down to not be driving beside a big truck.

It's made my life miserable. I used to get to work in 15 minutes, but for the past 2 years it's taken 45+. I've missed out on several after-work neighborhood activities b/c I leave work later (rather than sit in traffic), and the commute takes longer. Now it's getting dark earlier, so by the time I get home (7 pm), I feel like I've missed the whole day. When will this thing be finished?!

In addition to leaving early, sitting in traffic that is a direct result from the I-64 closure requires more gas consumption and causes higher stress.

Deeply affected one family member's work and school commute.

The Jefferson Avenue bridge reopening greatly lessened the affect of the eastern half closure, because it reestablished access to I-44. Before that, I took Hwy 40 to Hampton to get to I-44 because it was faster than trying to use the Jefferson bridge detour. Other than that, it is obvious that great planning went into these closures.

I take MetroLink to work. The closure of the Big Bend and Hanley overpasses has had the greatest effect on us.

eager road...oh my god, please help.....this is killing me

I was pissed that the website listed that Oakland and Clayton bridges would not be closed at the same time and then all of a sudden they were.

Since I am retired and no longer attend school--my schedule only impacts me as far as convenience is concerned. I live in Lake Forest Subdivision which provides a very inconvenient challenge when attempting to reach the highway going west--or stores to the south of me

Completing the Hampton bridge will make life a lot easier from the south side to midtown

I have totally shifted my route and avoid the area.

I work in the western half and now have the open I-64

It has put 40 minutes or more daily on commute times.

I have not changed it from the closing of the western side, I still have to allow extra time due to reach my destination.

My company moved from Clayton to St. Peters prior to the closing in part to avoid disruptions.

This part of the closure hardly affects me at all. The other part significantly affected me.

I think the workmen did a great job , the only thing I do not like I can't see 40 from my window at WORK .

During the eastern closure, I will be using the Forest Parkway route, as I live by the Mall at Brentwood and Eager Road. Unfortunately, Highway 44 is too far out of the way south of me to use for commute to work.

I am a Muny season ticket holder, and I'm concerned about the eastern half construction will effect my commute to the Muny from the Chesterfield area.

Takes a few minutes longer to get from HiPointe to the Richmond Heights P.O. or Sam's Club. Not that big a deal yet.

We live near 270 and Ballas and work near 40 and Kingshighway in the CWE. Before, we traveled East on Olive and took 170 South to 40 East to the CWE. Now, we plan on traveling South on Lindbergh to 40 and taking Forest Park Parkway to the Clayton Metrolink station, toward the CWE. Even though the travel time may not change, enjoying the new highway will be a treat!

I go to work later to avoid the traffic and work later to avoid the home traffic. I will also limit greatly going out with my friends in St. Charles/West county. I have rescheduled business meetings in West/North county to make them closer to my home in South City. I am also going to travel by train to KC & CHI so that I can park in the city and not drive to the airport. North STL driving at night when I am a single woman is not a smart idea with inclement weather.

today 12/16/08 they changed the time of the lights at forest park parkway and skinker and traffic on skinker was horrible. There was bumper to bumper traffic from 1/2 mile south of wydown until you crossed the parkway. And southbound was backed up past Olive. I understand that you need to improve the traffic flow on forest park parkway, but do not cripple the north and south bound routes. What is going to happen on roads like Skinker when Hanley is closed?

At MODOT's suggestion took Page this morning (coming from St. Charles) all of the way to Kingshighway. The street was not plowed past I-170. So to get to WU I should go N on 170 and get off where? FPP is past capacity. If a road is going to be recommended as an alternate route then it should be maintained

I think MoDot attempts to spin that drivers shouldn't take the Parkway are a waste of energy. The fact is that most believe the sit time there is less than the sit time to get to all of the alternates you suggest. It will be the headache until the east side is completed. As we have all ready the county to the city is like a funnel and with the amount of business community traffic along with heavy residential there is simply no way it can't be more of a headache than the west side was.

I still have not found a safe route all the streets are closed or way out of my way of the places I need to go, it really hurt that Oakland also closed to skinker. Today was awful and had car trouble sitting in the long traffic lines. I had to cut off onto a side street and then that street didn't go thru had to turn around, ended up on big bend and tons of traffic...there was no safe clean streets to go.

Up until the eastern half closure, my job was terminated, so I no longer commute east of I-170.

The eastern closure has killed St. Louis traffic. The first two days were worse than the worst day of the western closure ever was. There is no path from East of 270 to downtown. With the western you could drive Clayton all the way down and it took less time than driving out to 270 and around to 44. Now there is just no path. There are no roads that go all the way downtown. Manchester is a joke as you cannot get by Hanley without a 20 minute delay at Hanley. Once by it you are again stuck in 2 places. Forest park parkway cannot handle the load Clayton did and is a mess. There is just no path. This brings up the question of why Clayton to Kingshighway in front of the zoo is closed. All you are going to do is repave it. This can be done with it open. 200% of your effort should be in getting this short eastern most section of phase 2 open. In fact you should open 1 lane east and west that would stay open during the entire project. This would solve your current crippling of St. Louis!!!!!! With this section closed Clayton is lost as a means to get downtown. With this open you gain 2 lanes all the way.

It is more like 40 mins earlier but you don't have an option for that.

Highway 70 traffic has been negatively impacted - the reversible lanes need to be utilized the way they were intended - eastbound in the morning and westbound in the afternoon.

Unable to shift commute times due to children's school schedule.

There are NO main thoroughfares from the south/east direction on I-64 all we have are city streets and Forest Park Parkway, which is a disaster and we were told not to take after the first day that 30% (your calculations) went that way. I have yet to spend less than 1 hour 30 minutes one way in my commute to work when it typically took 35-40 minutes. I went several ways in an effort to find the best way before the closure, and NO WAY came close to my normal travel time. MODOT stating that all is going good is far from the truth!! Why don't you survey some of the actual drivers on the road. I work with 10 others and all have the same opinion and travel time added to their day. The north/east at least had Page, Olive, Lindbergh we have city streets with tons of lights!!

I take Forest Park Parkway to I-170 in the am, I commute opposite the main flow (west bound), so not many issues except at FP Pkwy and Big Bend.

It's ridiculous that drivers are advised to change their work hours; "shift your commute time." Most employers are not that flexible or can't allow workers to change their hours. I work in the health care industry and have patients who would be negatively impacted by such a change. MODOT is so out of touch with the day to day reality of workers, it's insulting!

I'm a real estate agent, so I work at all hours, travel most roads. I have to schedule longer drive times to be sure I'm on time.

We travel from Zip 62062 to School in 63131 and then I travel to work in 63103. No matter how you slice it ... it is a bad commute everyday.

I live downtown and I am still trying to find a good route to Westport. Page is good, but I do not feel safe, especially in the evening. The number of open businesses, not counting liquor stores, is minimal, the traffic lights are not synced, and I find myself sitting at red lights with no cross traffic. Why aren't those lights flashing? Also, when using the Forest Park Parkway, there are no signs for where the next gas station is. The first half was bad, but this closure seems to be MUCH WORSE. I wonder if the spokespeople for this project really know how/where St Louisans live and work, also do they understand why Page Ave is under utilized? Mr Waelterman should take this route and see how safe he feels, and consider whether he would like his wife to take that route at 7 pm.

it seems that everywhere you go the stop lights are always red, and the people who don't go the speed limit in the left hand lane block the road. (they are usually on the phone)

I feel it was a poor choice to close Oakland at the same time that the highway closed. Surely, this could have stayed open until the highway was back up and functioning. This only caused more headaches and travel problems. I do not feel this project was well planned at all.

Although we live in the county, we did a lot downtown. The only things we do now are things we have to do for the kids--Upper limits, but other than that, we're avoiding it.

The biggest impact has been McKnight Rd. It has always been congested going North getting to highway 40, but now is worse than ever. There is a stop sign at a neighborhood right before you get to the highway that seems to really slow things down. For the last few days it has been backed up well past Litzinger. It's unfortunate because I just need to get to the interbelt and I was really looking forward to getting to it from McKnight.

I can now travel on the new section of 40 to get to work instead of up and down Clayton Road.

The closure may affect my social life to a degree, but I know it's temporary. Keep up the good work

I have always taken I-70 to commute to work. Traffic on 70 did not seem to be effected in the first closure, but the recent closure has effected traffic. I have a hard time understanding why the express lanes are not opened eastbound on 70 in the mornings and westbound in the evenings?

you have cut out all my "short cuts" and "secret ways", i.e. oakland to mackland to weise (thank you!!!!!!!). It is very difficult to get about, and just recently you stopped people being able to travel both ways on Berthold! I am still able to get to the areas I need to go to or want to go to, but what would take approximately 10-15 minutes, is now taking 1/2 hour to an hour.

vist the area 2 times a month. difficult finding routes when not entirely familiar with area. Would like to see a mapquest type program to assist.

I now do not leave my house until 8:15 to 8:30 becausue of the tie ups on southbound I-170

Because I travel North in the morning and cross I 64 somewhere between Big Bend and Hampton, I must route around the street closures. Not a real big deal until Hanley AND Big bend close at the same time.

I now have to leave about 30-45 minutes earlier than before. Now that the second half of 40 has shut down, things are EVEN WORSE than 2008. Did anyone think this project all the way through? Also - Why did you stop showing the accident stats in your Quarterly Reports? The only reason I can imagine is that accidents are WAY up since the closure. You can't restripe lanes, making them too narrow, then re-route thousands of cars and semi's, and not expect an increase in accidents. Why is no one tracking the personal stress factor? Does it not matter to MODOT?

Having to leave 2 hours earlier & getting home 2-3 hours latter because of the closure is insane. IT SHOULD HAVE NEVER BEEN DONE!!!!!!!!!!!!!!

backup on southbound 170 exiting at Hanley is bad, even hazardous. Need to adjust the light at Hanley to let more traffic exit the highway. Not sure why this has recently gotten so bad unless they changed some signals as it hasn't been that bad since the first week of the 40 flip. It shouldn't take 20 minutes to get from Forest Park exit to Hanley. I have tried leaving work earlier (as much as an hour), same problem.

ACCESS TO HWY 40 WEST OF I-170 IS IMPOSSIBLE BECAUSE MCKNIGHT AND BRENTWOOD TRAFFIC TO THE HIGHWAY IS BACKED UP AT RUSH. THE TRAFFIC LIGHTS DO NOT SEEM CAPABLE OF FLOWING TRAFFIC EFFICIENTLY. THEREFORE, I STAY MORE ON SIDE ROADS AS IF THE HIGHWAY IS STILL UNDER CONSTRUCTION.

I travel to and from work from the Metro East (O'Fallon, Illinois) to Chesterfield, Missouri and travel either 255/270 or 44 which adds around 10 extra miles to my commute and an extra 20-30 minutes commute time and more money in gas.

I must now take manchester to hanley to 170

The closure of the road negatively impacted the amount of business done at my job, and I had been laid off because of it.

This project has been a real pain. MODot is the most incompet branch of this state government.

I don't need the freeway to commute to work, thankfully.

I can get onto 170 Northbound much more quickly! Takes me a little longer to get to the west end areas

The closure has only prevented me from visiting a restaurants during my lunch breaks that are slightly far from downtown.

I have relegated to the expressway and the intersection at Skinker needs some tweeking and soooooon

Honestly, I expected this half to be worse. It isn't the most convenient process in the world, but my drive to work isn't as bad as I thought. Fortunately, I'm not required to be in the office at any certain time. Also, the "back way" (beside the Best Buy in Richmond Heights) around Hanley/Eager is nice. That said, I am looking forward to the new Big Bend exits opening up...hopefully they make the same good time as they did on the western half.

I live on the eastern end of the closure but instead of going to the Brentwood/Hanley area to shop/eat, I go to Illinois.

The major problem I've encountered is the lack of left turn lights along Dale Avenue. It would be helpful, especially at rush hour, to have left turn arrows at Hanley and at McCausland. It is nearly impossible to make a left onto Hanley from westbound Dale Avenue.

I'm retired and do not have a regular commute. I take pains to do my errands between 10 AM and 4 pm when possible. In ant case , I try very hard to avoid being out at rush hour. I used to use Forest park park way a lot; now I use it as little as possible, using a Delmar or Vernon route east to Skinker, and Waterman or Lindell to get to my final destination or crossing point to St. Louis city destinations. This isn't good at rush hours but works well for my chosen travel times. I always plan my errand schedule to achieve several errands at once, for example, gas, post office and grocery store, or a trip to 3 or 4 destinations along Brentwood, like PetsMart, Trader Joe's and or/Whole Foods, Target and/or hardware needs at any of the three stores in that area. This saves time, trouble and gas. I rarely drive more than 2 times a week unless I have volunteer work to do, which I can't usually schedule myself, and sometimes I do errands in conjunction with that to save time and travel.

Satisfaction Comments

The following comments were left in response by those who wanted to leave additional input after the satisfaction questions (for example, *Please indicate your level of satisfaction with how well the public has been kept informed about the New I-64 Project*). The comments are presented as they were received.

I think Gateway Construction has done an excellent job of making this as painless as possible. But I support the decision to close it for two reasons.... 1 because they have worked hard to schedule closures around events in St. Louis but more importantly because it undoubtedly has SAVED LIVES OF OUR ROAD CREWS! To save even one life makes all of this worth while.

lane closures still continually happen even on the "completed" sections. Entirely too much of the highway is closed at a time, restricting access to many bridges and side roads make travel very difficult adding 5-10 miles to travel, in frequently stopped traffic.

I think that the elimination of the I-64/US40 updates in Sunday's Post-Dispatch has been a disservice. I realize I can go to the Website, but the questions people posed often coincided with my own questions and interests. In general, however, I think the project has gone rather well.

It's too bad that there is no real transportation improvement as a result of Hwy 40 being rebuilt. You're just spending half a billion dollars to move more cars w/o any consideration to a TOTAL transportation solution. MODOT needs more people with vision running it. Not people who probably get kickbacks from concrete companies to pour more concrete.

detour routes should have been planned better and even constructed before hand, this was the most unacceptable part of this project, although in the long run it will be favorable to have a better I64

Bravo to all the hard working Men and women of "The New I-64" and Gateway Constructors. I still can't believe how fast these two years went and how little hassle this has added to my life. I look forward to December 7th.

I have been very Satisfied with this type of schedule. I suggest MODOT and St Louis County take this approach when possible.

Very impressive that everything seems to have been on schedule or before schedule.

The most wonderful thing about closing the highway to do the work is: Not one worker was injured or killed by a motorist in a work area!!! Hooray!!!

The construction work zone signs were OK, but the lack of traffic obeying them and enforcement was disappointing. I felt I was crawling when all traffic was flying by at normal speeds.

Very well done; I agreed at the outset that this was the way to do it, and it's worked well for me.

It has been VERY obvious to me since day one, that this project was WELL planned and the plan was well executed. Mr. Galvin was a superior spokesman and project manager. The rest of the highway construction firms across the nation should take notes !! Lots of them. GOOD JOB!! Everyone...and thanks.

it would be nice to let others know on your website about alternative ways when 40 opens back up but you close vandeventer ave at 40. This could turn into a extreme mess and headache since i have no info if other major streets are closing also.

I cannot comment on the work in progress situations over the last two years. I live in another region of the Country.

i was under the impression that all the 3 lane parts of the highway would be going to 4 lanes only to find out that the parts that i feel were the bottleneck of traffic, will still be 3 lanes. good job MODOT, way to waste money like the solar powered speed limit signs on 270 (yeah that really helped). i wish that we could vote on the people that make the decisions in MODOT that "WASTE" my tax dollars on things that don't help traffic flow at all (especially the mile markers every 2/10ths of a mile, WHY?, i do a lot of traveling and have never seen another state with this) . i can't wait to see when 40 is just as congested after all this, as it was before this started. >WAY TO GO, MORONS< guess i'll have to wait another X amount of years to be put out of my way going to work so that you can waste more of my money on things that won't help traffic flow.

Throughout the process, I thought MoDOT and Metro could have done a better job communicating public transit possibilities. For that matter, Metro could have installed specific routes to help with easing traffic congestion.

MODOT was only thinking of MODOT and not the people as we were force fed all of their propaganda. Everything is going great as MODOT pats it self on the back for doing what they wanted to do.

I have been extraordinarily impressed with MODOT and this entire project. Not only has it been done in a timely and fiscally appropriate manner, but the quality of work is also very high. I know it's a highway, but I really like the look of it as well as how it's been done.

I was appreciative of how the overall project went... but when it opened up it also flooded the i64 from Boyle to the PSB. Traffic is horrible through there now.

And now that it is open I am more dissatisfied as the Hanley south exit is no longer direct. How completely stupid is this MODOT goes out of its way to restrict access to the main north south route in this area. Why would MODOT make it harder for us to get to where we need to go? Just STUPED! !

Great Job. I am convinced this project will finish on time.

I suffered change of commute time from 20 minutes to 50 minutes for a year while the western half was being done- and I did so mainly with a smile - I love the new section that is open - - but am having a very hard time being trapped north of 40 especially since someone caved to the complaining Boland residents and let them close that route off - people cut through my neighborhood all the time - I should be able to cut through theirs!

Having no way to get from Clayton Road to Manchester between Brentwood and Bellview is a ridiculous traffic plan. Closing Hanley and Big Bend at the same time was bad enough, but now that all the streets between Hampton Park and Big Bend are one way it's impossible!

I was very satisfied with how the closure has been handled up until this month.

It's funny, when you closed the west half of I64 you did not close two major overpasses within a mile of each other at the same time affecting 75,000 drivers each day. Why didn't you close Big Bend earlier and then do the little over/underpasses that we no longer have access to? AGAIN, STUPID PLANNING!!!!!!

The choices of answers do not leave room for discussion. There is a lot of inconvenience to the people who use streets for travel instead of the highway. A lot of alternate routes are longer and slower. I do not feel that employers have cooperated by adjusting hours of their employees, either. This could really help, but I don't see it being done.

Alternate roads are far too congested at peak times. Lights were not retimed to accommodate the additional traffic flows which makes these roads very hard to drive on.

I hope all major highway construction can use the new I-64 as an example of how things should work.

Knowing what I know now, I would rather have had lane closures for 6-8 years.

I'm glad that we are trying to do things as fast as possible. However, I don't think it's such a great idea to force everyone traveling from Clayton to 44 to have to take Brentwood Blvd or go all the way around to Hampton. Closing both Hanley & Big Bend at the same time has caused my commute to now be an hour and thirty minutes when previously it was only forty five minutes.

This is immeasurably better than having to endure 10 years of hassles, lane closings, bridge closures, etc.

I don't understand why the Big Bend & Hanley overpasses needed to be closed concurrently when it was stated by MODOT before that they would not.

I have NEVER seen a "major city" shut down a whole highway. The Dan Ryan is much bigger than 40 and it was replaced without a total shut down.

The first half went just fine. The second? not so much.

There isn't big enough of a push for using other forms of transportation. The city could be advertising Metrolink and Metrobus as viable options for commuters, but I have not seen clear indications of that.

The decision to close Hanley and Big Bend at the same time was irresponsible.

The western half was much easier to work around. The eastern half lacks sufficient roads to get into and out of downtown without the highway open.

THANK YOU for doing it in 2 years. The western half is great...hoping the eastern half is comparable.

Contractors are doing a great job and so too is M-DOT.

Better maps showing the area need to be posted on the website. I am not from St. Louis and I have a meeting in the vicinity of the construction and there is not much there showing me, someone NOT familiar with the area alternate routes.

It would have been much easier to travel if Hanley and Big Bend were not closed at the same time. Makes it difficult for Wash U employees to go to businesses south of 64 on lunch break.

it would be nice if you had, in your press releases included an updated map of the area affected. A little more information would be helpful so people don't have to hunt for it.

Closing the highway for 2 years has affected my business in St Louis greatly. It has also affected myself and my fiancé by increasing stress while driving in St Louis. For those 2 reasons alone we are moving out of St Louis.

Outstanding job being done by MoDOT and contractors!!!!

The topography of the neighborhoods affected has changed and the limited landscaping solutions are inadequate. This is a project that is not helping the economic growth of the area. Some business have been lost in my area, growth is being hindered in the immediate areas and traffic between Big Bend and Brentwood is a daily nightmare. The creation of large dump sites in residential neighborhoods, with varying degrees of toxic inclusions is ridiculous. Fred Weber has quarry sites to get this material to-not in my air or watershed. If it had taken the 6-8 years, the dump sites would not have been created.

Although a bit inconvenient, it's gone far better than I expected. The 2 year complete closure plan is far preferable to the 6-8 year lane closure plan.

See previous comments. Please fix Eager Road!

I have been thoroughly impressed with this project. The project coordinators are organized, efficient, and communicate clearly with the general public. I have never witnessed such a large-scale project conducted with such efficiency and strong adherence to a time schedule. I applaud all members of the project team!

What a CLUSTERF#~%. I was travelling in St. Louis after a Cards game and then some sightseeing walking downtown last night (8/12) and drove out Market St to catch I40 West completely unaware of this project. Our FIRST warning was where we merged onto I40/I64 saying all traffic must exit. NO suggestions of detour routes at all!!! We attempted going North on Kingshighway and quickly found ourselves in what appeared to be questionable neighborhoods considering it was just after midnight so we backedtracked towards where we had always used the highway. We did finally see a detour sign at a corner (Oakland Avenue I believe - problem being there were TWO of them side-by-side with the arrows pointed at each other I think they had been moved there simply to get them out of the roadway. After a while we finally found Clayton Rd (a name I recognized from previous trips in the area) and now it'd eventually take us to I270. Someone deserves a serious cut in pay for failing to put ANY detour routes up for travellers not familiar with this area!!

You publicize the huge things - but lo and behold - we get stuck in the lengthy delays of these ongoing things - putting up the sound walls, re-striping, whatever. Explain to me why a brand spanking new highway has lane closures every day? NO EXPLANATION except that it simply IS NOT FINISHED.

Not sure it really matters how the public feels. It was something that was decided had to be done. I live in Illinois and work in Ladue/Olivette it is a pain driving to and from work. I do appreciate the Traffic Alerts I receive. I only wish they would have included side streets.

I don't see the expected extra traffic on 1-44 to justify the change in the lanes. Who thought of this???

I thought that there would be much more communication to the public on the status vs. schedule. Major things are announced but you have to catch a rare news piece to know if things are ahead or behind schedule.

The complete closures are simply awful! I tried to get to Webster Groves from Overland one day recently, and I had to go all the way to McCausland because all other southbound roads were closed because of bridge construction or the neighbors didn't want traffic on their streets. I wish we could have closed Page for the same reason. I hope this will never be an option again when MoDot does road repairs in the future.

Forest Park Parkway. What a nightmare.

I cannot believe that you closed the only major east/west access point to Saint Louis for two years. Complete idiots. I've lived in many cities across the world but have never seen administrative and construction incompetence at this level. The complete lack of access and possibility for future major administrative idiocy is the major reason why I've moved my business to Chicago.

OK, I was highly skeptical when this whole project started. After the west section re-opened, though, and experiencing the improvements (including those faboo flyover lanes from EB 40 > NB 170), I'm won over. I realize not many projects of this size/scope have been attempted. You guys have been terrific - at first, again, skeptical with the amount of local news time, etc. But appreciated it as time went on, knowing exactly what was closing and when, and the pains the project team took to give alternate routes, timetables, and work with the local businesses. The one thing that was AWFUL was the signage. 170/Eager changed so many times, and it was never clear which lane you needed to be in by when to safely get over. I still see people swerve dangerously to get on 64WB, not realizing that the right lane is to Eager and the next two left lanes are for the highway. VERY confusing, very dangerous. I also think the narrower lanes on 44 were a big mistake. Don't know what the accident rate is, but I avoid it like the plague because of the narrow lane size, the amount of traffic, the trucks. PLEASE restore these lanes back to normal size when this is over. Also, didn't like the elimination of bike lanes on larger cross streets, but realize it was necessary. Will they be restored? All in all, you guys have done a commendable job. I had serious doubts at the beginning, but it has worked out great - I have become better acquainted with some of the local businesses on Manchester, etc. and end up shopping there by choice now vs. the direct-from-hwy big-box stores. So that's a plus, too... NICE JOB!!!

If one name could be given for the responsibility of this decision, I would begin a campaign against him/her.

signs aren't always posted, workers don't stay within the spaces already designated strictly for them, things change multiple times every day with no warning on roadways.

The problem is not the closing of the highway - it's the way traffic & construction for all alternate routes is being handled. The closing of so many roads and bridges all at once has been paralyzing for the drivers in my area. I'm talking about the combination of the closing of 64 between Skinker and Hampton, the closing of Hampton bridge and the bridge on Oakland over 64, and the attempts nearby to direct the flow of traffic away from certain residential streets using one-way signs and blocking through-traffic from some streets. And then to top it all off, on Mar 6 you couldn't cross the Tamm st bridge by the zoo and drive past the zoo towards Hampton. The traffic was backed up all the way from Skinker to the zoo, stop and go traffic waiting to turn on Skinker. I don't know why you couldn't get through past the zoo. There are no signs warning you of this on the south side of the Tamm st bridge. There should be a lot more signs communicating these changes. I don't know how I'm expected to travel from Hampton and 44 to UCity. It's increasingly difficult. Skinker is a nightmare during rushhour. Forest Park Parkway is gridlocked, and it has ruined any streets that intersect with it. Big Bend is usually ok, if you can find a way to GET to Big Bend in the first place.

6-8 years would have been an absolute nightmare. By keeping us (the public) well informed we can adjust our commutes and/or driving routes to sidestep the current construction zone. It seems like a daunting task to many St. Louisans at first but once they discovered new routes to take everything settled down.

Eager/Brentwood Blvd I-170 are a mess with signage, lane markings etc.,

I live slightly west of Manchester and McKnight. The traffic has been horrendous on Manchester Rd, especially since I have to make a left out of my street. I know lots of people are using Manchester as an alternative (I know I am). I am looking forward to the traffic lightening up on Manchester now. My family lives in St. Peters so we already (today) have taken advantage of the opening. Great job. It's amazing how quickly it was done. I've enjoyed tracking the progress on your website. It's been educational for my kids too. None of us knew just how much went into demo and construction.

Population of the City is more dense than in a 5-mile stretch of highway in the county -- you didn't take that into consideration. Parking on Lindell

along Forest Park should be prohibited 24/7 during construction.

Over the weekend I was traveling west on Oakland and tried to turn left (south) onto Hampton to get to Manchester; however, there was a "No Left Turn" sign posted at Hampton and Oakland. So I proceeded west and -- like everyone else -- hit the barricades at the Oakland Ave. overpass and had to u-turn. I am angry that it was stated in the Post that drivers "ignored" the "Road Closed Ahead" signs -- there weren't any! If I was able to see a small "No Left Turn" sign, I would have seen a Road Closed Ahead sign. Furthermore, how did dozens if not hundreds of other drivers also "miss" this sign. I'm not nearly as angry about that overpass being closed early as I am about you claiming there were signs when there weren't any.

US61 signage was lacking. Effects on bicycle commuting appear to have been ignored for a year. I feel I was not told the truth about: - When work in my back yard would happen and be done. - What was sprayed on the foliage in my yard and what I could do about it.

I am glad the decision to complete the work in 2 yrs vs 6 yrs was made. Now, half of the highway is completed. Also, the coverage on local news has been good in keeping me informed of the progress.

The local media and Dan Galvin have been doing a superb job keeping us informed,

While the new section just opened, we could tell travel East and West via Olive has lightened substantially.

I wish all government-sponsored activities ran this well. Excellent communication and media relations.

While the job, as designed, has been managed well, I question the value of doing all this work to end up with a product no better than what was there before. It's shocking to see new bridges going in no wider than the old bridges, and the elimination of secondary access points (Galleria Parkway, Laclede Station Rd, etc.), that previously allowed us to avoid the horribly congested ones. Also, it's hard to understand why this job takes so long and why there aren't more crews and why they aren't working 24x7.

I think it overall was handled well until now, but I am concerned with the north / south routes coming up.

It's unreasonable to have Oakland Avenue closed to through traffic when there are so few alternatives for city dwellers to travel west into Clayton. It's a perfectly good stretch of road that is not being utilized.

I respond satisfied because obviously the 6-8 years would not have been a piece of cake but the east side is going to be ugly--you have Wash U right at a busy corner of an alternate and you have Forest Park sitting right where 10K people attend the Muny....you had none of those things on the west side.....

I hate that this starts in the dead of winter and bad streets its dangerous

Outstanding management, planning, and implementation. I can only feel disappointed that the additional sound walls were not already in place in this time since it is apparent that beyond the roadway, the project actually was NOT completed earlier than normal in whole.

The western closure was not as impacting as we all feared. I would give you an A+ on this. The eastern closure has crippled the center of the city. I would give you a F--- on this. All efforts must be given to getting 40 in front of the zoo open so that traffic on clayton can flow. This is a high high high priority section of the project.

A bunch of money was spent on the project completion count-down calendars for the highways - they have been turned on for a few days, but not regularly. Why was so much money wasted to not be used?

I take 70 in and the directional lanes need to change to Eastbound in the morning and west in the evening.

When I was a kid, I-294 around Chicago was completed one mile per week. They had to build bridges, move homes and started from scratch. They had almost unlimited labor resources and was quite a project. One Monday they were behind my house moving our neighbor's homes out of the way and grading the roadbed, by Friday they were pouring concrete, and on Sunday the road was stripped, signed, and it was done. Amazing. I assume blending the old and new takes longer.

Closure of Eastern half has impacted me so badly that the quality of my life has been doing down.

The ramps connecting west bound 64 and 170 have work zone speed limit signs of 40 mph but when I travel these I am the only one going this speed and have noticed other drivers upset that I am going this slow. Is this the correct speed or are the other drivers just not paying attention to the posted limits?

The Oakland closure and Dale Ave is a perfect example of the poor communication. I was traveling east on Eager on Jan 2nd and saw the signs for Dale Ave. My mom even pointed it out to me as I was heading to Dale Ave. Well, I ignored the signs because I knew that I could turn at Dale off Hanley...WRONG. I heard about this for the first time today...kinda late. Also, I think the alternative routes should've been better explored. Example, why is Jefferson Ave still not open southbound??? Also, closing Hanley and shifting the traffic to Brentwood was simply a ridiculous thought. Why didn't someone test these routes out on normal people before they just knock down overpasses and expect us to figure a way around it.

I think the western half of I-64 is beautiful!!! I hope all of the new plantings survive and look great for years to come. Thanks for making I-64 (west) beautiful!!!

Sometimes the signs don't make sense or they don't warn you until you're right there. I don't have any specifics examples, but I do remember a couple of times thinking I wish I knew this about 1 mile ago. I do really enjoy the new Western side of the highway.

The opening party was nice to go to, but there should have been people there with info about the carriage rides. We were there looking all over for where they were going to start, waited a very long time, along with many others, asked several people, who ended up giving conflicting info...we finally gave up just in time to see the 2 carriages arrive. 2 carriages for that amount of people? Not nearly enough. And they were small carriages at that. Other than that, we did enjoy being able to walk on the highway before it opened and look forward to doing so on the east part of the highway. Hopefully any activities (other than the bike rides, which were fun to watch) will be better planned and executed.

You have done a GREAT job communicating and getting everything done. My only complaint is the concrete lifeless jungle you have created on hwy 40. I understand home owners may have wanted them (but why did they live there to start with and I question the tactics used to get an agreement), but you have taken away all the charm and life out of the highway. You have even blocked business that I am sure relied on drive-by traffic. PLEASE reconsider creating the concrete vacuum on the other half. It's not that loud, I use to live by it. If it is too loud, move. PLEASE keep the charm and warmth that is St. Louis and don't block it out.

continued problems of grid lock at skinker and forest park continue. Police need to patrol southbound skinker for cars who block private streets and do not keep intersections open. signs are not sufficient and grid locked cars disobey. tickets by the gross are in order till behaviors improve.

While the traffic impacts aren't as bad as I thought they would be, I do not believe that doing this project with the highway open would have taken 6 to 8 years.

This project could have been done one side at a time as many other interstate projects are done without too much of an impact to the timeline.

There are enough people and construction workers unemployed that you could have doubled up on the crews and completed the project in less than two years with the total closure concept and maybe even saved some money as completion of the project sooner would have less of an inflation factor. Marsha marshab80@gmail.com

Obviously the Parkway is a mess. I do not understand why Big Band was not rebuilt at the same or almost the same time as Boland Place and Highland Terrace. That way it would be done now and the Hanley overflow would have a reasonable alternative.

The overhead signs, telling us how long the travel time is to a certain highway, are ALWAYS WRONG during peak times. The changeable speed limit signs on 270 are a joke. If I could possibly do 40 mph at 5pm on 270 southbound, I would take back every nasty thing I have ever said about MODOT. By the way, how much did those "Countdown To Completion" signs cost? Those have worked about 10 days over the past 13 months. Another huge waste by MODOT!

The east closure I don't take to get to work - but I travel that exact stretch for church and MANY other activities. Lots of friends live over there. It is INCREDIBLY inconvenient as all the alt routes are heavily trafficked and MUCH longer. Wish a better plan could have been made for the east close down. The west closure was much easier to find an alt route. But having the whole east stretch closed is killing me!

MODOT deserves credit for how relatively smoothly things have gone so far.

Who ever arranged it had better have been fired for this stupid idea.

you could have done this without shutting down the highway and in far less than 6 years. you can say six years but that is the party line bull crap to get what you wanted. I can NOT believe it would have taken to 2014 to get the job done.

While I realize it would have taken more planning and cost a few more dollars, I do not believe it was as much as you are saying. Also, the region has suffered because of the shutdown. I go to St Louis for work because I have to. I did not purchase my seats for the Cardinals, Rams or the symphony this year or last. I will consider it again in 2010 after the highway re-opens.

Mo Dot should have completely closed the highway for a yr

Gee, the world didn't come to an end, did it???

I can't wait for this project to be finished. It is sapping our city of people, economic activity and vibrancy. I hope that measures are being tackled to bring people back into the city once this is all over.

I am really tired of hearing from the people who nitpick and whine about everything! Some of the questions asked in the newspaper about the project are so picky!

Very smart to close only for 2 years. The impact has not been as severe as many predicted, and the benefit will be great.

you have caused massive traffic jams on streets and roads not equipped to handle the volume of traffic. this traffic has caused destruction of road surfaces with no thought as to upkeep and repair of the destroyed surfaces. the waste of time daily in my commutes during the first section closure caused me to alter my life significantly for one year when the project could have been done nearly as fast by performing the work sequentially on westbound lanes and then east bound lanes with total closure for the times needed to destroy and rebuild bridges. i hope that the surface is better built than the deteriorating surface of I-170 which has large holes in it already.

MODOT should insist that StL news agencies refer to the interstate by its true name, I-64. 40 is not the name of the interstate, so it's not I-64/40. If anything, it should be I-64/US 40. But no one in St Louis refers to it by anything other than 40 or Highway 40. The superseding name is Interstate 64. Signs, news updates, and other information should refer to it as such.

Just never heard of an interstate/freeway being closed in the middle of a major city; traffic in a city is to be expected...I'm just sayin.

I live right by the intersection of Forest Park Pkwy and Skinker (I live on Waterman). Traffic in the morning, since the Eastern portion of 64 closed, has been a NIGHTMARE! I never take Forest Park Pkwy North, to get to work anymore, and I certainly do not take it coming home. The changing of the stoplight timers has made the situation worse. If you don't want people to take Forest Park Pkwy, the timers never should have been changed--this would have made alot more people take alternative routes instead of majorly clogging Skinker. Again, the second half has become a nightmare. I want to commit an act of road rage every single day. Oh, I forgot to mention, since the 2nd half of the closure, and everyone and their brother taking FPP, I have never heard so much horn honking in my life. Even after I finally make it home, it's honk, honk, honk for at least an hour.

I am strongly dissatisfied that Hanley, Hampton and Big bend overpasses will be closed at the same time. Is this a conspiracy to keep the north and south side residents of Clayton road from getting anywhere. On any given day, Brentwood is a mess and then next nearest route would be kingshighway!!!

1) Screwed up on Lindberg to west bound I64. Right lane goes straight, left lane ends. You have it confusingly marked with the right lane ending and the left lane going straight. Really mixed up here? Accidents waiting to happen. (It needs to be consistent and it's done both ways all over town) 2) East bound I 64 @ I 270 ONLY TWO LANES GOING EAST???? That's nuts!!!! What a mess you have created. You have eliminated a lane and caused a backup & accident zone for out of towners. I thought we were trying to make things better? 2 Lanes on east bound I 64 is going to be a mess for years to come. 3) Spoede both exits suck. East bound exit. Mound of dirt blocks view as you approach intersection at Spoede & Outer Road, Fence totally blocks view of oncoming south bound Spoede traffic, another accident waiting to happen. 4) West bound Spoede entering I 64 has a sharp turn and no barrier. Cars will end up down there and the entrance ramp is too short. I thought you were going to improve it? It's shorter?

I don't understand why the streets in the "Dogtown" were blocked. It is difficult to drive the routes in the area.

AS I have said before, more attention could be paid to routes north and south across the closure. I live north of it near Delmar in U. City and do the bulk of my shopping south of it, mostly in Maplewood and Brentwood. So far, if I follow the precautions and routes described above, I do pretty well, but I really dread the Big Bend closure, which will considerably lengthen my route for my most frequent errands, especially if Hanley Road is still closed.

Alternative Route Comments

The following comments were left in response by those who wanted to leave additional input after the questions about alternative routes. The comments are presented as they were received.

*can you leave the temporary lanes as permant on 44,70, and 270. With 40 opening and the additional lanes it would be great. Mike
314.757.1116*

Obviously the Forest Park Parkway is usually a mess. Ijust wonder why it is taking so long to open Big Bend

The lanes on I-44 are too narrow and extremely dangerous. I realize there wasn't any other alternative but there have been an enourmous increase in accidents because of the narrow lanes. The repairs on I-44 because of the restriping has been especially dangerous for motorcycles. I've told my family under no uncertain terms that they were forbidden to ride motorcycles on I-44 until it is completely repaved!

additional lanes have large rain grates causing large bumps and suspension damage to my vehicle. Attempting to pour asphalt into these grates did not smooth the road, and caused rain water to create deep puddles in areas where people travel 55+ MPH, I have witnessed and almost been hit by at least 3 spin-outs caused by these water hazards.

My impression is that I-44 is more dangerous, especially as people think they have gotten used to the narrowed lanes. I hope there is a reversion to the usual lane width. I have my doubts about signal timing. I can try to travel at the speed limit on a major thoroughfare like Grand Blvd., and get into a sequence where I have to stop at a succession of lights. There aren't enough "smart lights" in St. Louis. It's probably unrelated, but I'll note it here: Whoever made the decision to alter access to the eastbound ramp to I-44 at Southwest should have his head examined. Unless something changes, it will be an unregulated intersection, and it's only aggressive drivers who have cheated and turned left from westbound Southwest toward eastbound I-44 anyway.

The only thing I've noticed is I have to wait at red lights with no traffic coming through the cross street. It's a waste of my time (at least I'm not burning through gas sitting there.

traffic signal timing, whats that???

I lost my car to a wreck on 44 due to no shoulder! I am furious. AND, there still aren't safe places to pull over in the event of an accident. Even the places that are designated are not accessible when there's a huge curb-like step up to get off the highway. 44 was poorly done.

The only problem I have encountered is the merge from eastbound I44 onto northbound I270 as the traffic backs up there every morning. I am hopeful that the reopening of I64 will relieve some of that.

Hurrah for finally getting signal coordination on major city routes!!!!

The only thing I would have changed was 44. The lanes were trucker friendly. I have driven truck all over this country and 44 was the worst I have ever seen. 44 is a bad highway in the first place then the lanes very uneven making it hard to keep the rig in the lanes. then people on the phone don't watch where they are going.

synchronization of signals was noticeably improved.

St. Louis city traffic lights were not in sync for very long. Especially on Kingshighway. The county lights were much better.

adding lanes to 44 and that didn't seem to make any difference to me, just seemed like more money wasted. and on 70, the only added lanes were out by the airport, but it still just got congested right after it goes back to 3 lanes going east, and going west past 370 is just a nightmare no matter what

I have always seen the way lights are programmed in the city to be bad - and the additional traffic and changes to lights just seemed to make things worse. The Manchester timings, however, did seem to work as advertised.

MODOT has wasted funds in several ways! doing all of this work and not adding lanes is completely stupid, variable speed limits on 270 does not work (when the speed limit drops to 55 or 50 traffic is already at 20mph) MODOT wastes our tax dollars

44 could have handled the extra traffic it got even with its 8 original lanes. But making each lane narrower to add another was scary with all the trucks around.

IN MODOT's plan Why would they build bridges to restrict future expansion? I just do not understand what MODOT is thinking when it comes to this project and I expect nothing but excuses from MODOT for not giving the people what we needed

I do not drive the interstates to work. I live in Affton and work in Clayton. The only way to work is either Skinker, Big Bend (closed), Hanley (closed) or Brentwood.

At rush hour, it is better to take I-44 and I-270 and the west half of I-64 to get from the central west end to Clayton than going through midtown i.e. Forest Park Parkway.

If you are a visitor to St. Louis, I think these "improvements" would be no help at all. The ones I have seen are confusing. If you are driving along in the made 60+ mph traffic, and you just entered St. Louis, you would be sunk.

I-44 people tend to drift when they drive lanes a little to close

Walking, biking, car-pooling or riding Metro to work are completely inefficient for me and my job. Interesting how you didn't care about my feedback to those questions.

The lane changes on 270 have been convenient... I'm hoping they don't turn the highway into a bottleneck when they are gone.

If the lights on Manchester have been coordinated, it would be hard to tell. Also, it would have been helpful if you did something to open up traffic at Manchester and McCausland, and through Maplewood. The McCausland intersection is a nightmare. Forest Park Parkway is no picnic either!

511 doesn't work on my cell phone

The narrow lanes on the other interstates were not worth the \$\$\$ to put them in and then take them out after the construction. They were a waste of my tax dollars!

There is no sholder on I-44 and it is very dangerous. I hope that the lanes will be put back to how they were before the project.

Sometimes your times aren't accurate. Maybe a couple of minutes off. Usually in traffic it takes about 18 minutes from I255 (at JB Bridge) to I40 in the a.m. On the whole, a very good job. Love the signs. Read them all the time.

The additional lanes on 44 have increased accidents and make driving in those uneven lanes very hazardous. No shoulder means people that encounter a flat tire are forced to ruin wheels by driving on the flat until they can make it to a shoulder sometimes miles down the road. I am positive that a number of deaths have occured due to the uneven lanes, increased traffic and no shoulder on 44. I would also assume Road Rage has increased with the traffic on 44.

With the closure of Eager Rd. at Hanley, it seems no one thought of the effect on the traffic on Dale and through the shopping area in Brentwood. The traffic is not allowing garage traffic to exit, nor actually stopping at the crosswalk from the garage to the office buildings. Someone needs to direct traffic At the intersection of Dale and Hanley and at the stop signs-Best Buy and Metrolink. Gateway Constructors does not plan well for the traffic around the road blocks they are creating and have created.

the temporary lanes on I-44 are VERY NARROW and dangerous espically late at night when more intoxicated drivers are out after the bars close!

What's "511"? And I saw ABSOLUTELY NO info dispayed alerting of this interstate closure!! (We came into STL from Hannibal using 61 then I70, spent time downtown, and then intended to use 40/64 to get back out to 61 for our return home.)

The traffic signal timing is a no-brainer. We KNOW that it saves fuel. Why is this not a permanent thing REQUIRED of all municipalities? There are, of course, many places where lights are NOT synchronized.

The extra lane on I-70 has been very nice. The ramp from I-270 to I-70 had horrible merges both in the middle and at the end before. Now it's easy to do. Has MoDOT considered keeping that ramp configuration or otherwise maintaining the extra lane in places (perhaps as an auxiliary lane)?

Suggested detours to WUSM are ineffective and dangerous. If we travel the suggested route to the Clayton parking garage, we find the street tore up ALL THE TIME. More than once for different reasons. Try traveling West down Clayton toward Taylor. Why block out side street parking where commuters used to be able to park for free????

Please do everything the state can to keep light timing synchronized on streets like Manchester.

The day they closed the first section of Highway 40, Overland changed the timing of the traffic signals on Page Avenue, especially the "Overland Nightmare" series of signals between Walton Road and Woodson Road. This makes it impossible to get through five intersections without having to stop at each light. How did they get by with this?

It's hazardous when cars break down on 44.

The lane addition on I-44 has been so great, I wish it could stay that way. Traffic has been even better than before construction, for the most part, except on Cards game days.

The idea that you can close the major point of entry east/west into Saint Louis is completely incompetent. This idiocy has added at least 30 minutes to my daily commute one way and has resulted in me moving my business to Chicago rather than drive an extra hour each day. This decision was completely irresponsible.

The narrow lane lines were horrible, dangerous. Please restore proper width. Also, elimination of bike lanes on Ladue/Clayton was rough. Multiple changes at Hanley/Eager/170 was very confusing. Signage, more of it, more prominent and giving better guidance would have helped a lot.

adding lanes has caused more headaches (if accidents or otherwise exist, nowhere to go and causes further delay). the additions also weren't fixed to keep the roadways level, causing much tossing around of vehicles.

I had no experience previously with the added lane scenario implemented for I44, I70 and I270. Now that I've driven these roads I am against the practice. This could possibly be a workable solution if large trucks were banned or restricted to certain lanes. For me the time saved is not worth the harrowing experience of travelling in such close proximity to other vehicles.

I-64 closed messages on electronic signs is old news that you ought to have on permanent, long-term signs. I thought the expensive signs were for reporting stuff that "just happened".

The signals on the Forrest Park Parkway are never timed correctly to alleviate the endless bottleneck from Clayton to Kingshighway.

The light at McKnight and Litzsinger was my most favorite improvement. It had been needed for so long and I HOPE it never goes away!

The light at Warson and Ladue serves to slow down traffic quite effectively. You did not ask about the added center turn lane on Clayton. It obliterated the bike lanes so well that I feel my life is in jeopardy riding my bike on Clayton when it used to be a most preferred bike route.

I am VERY unhappy, and feel we were deceived that the sound wall would be complete before the re-opening of the western half. As a taxpayer, why does the contractor deserve a bonus payment when procurement of critical materials was not completed on time? I feel the overall project was successful, but I feel this aspect was not at all addressed.

Traffic signals on Union Blvd northbound to I-70, I leave at non peak hour before 6 am, and usually hit 6-7 red lights in less than 3 mile stretch. I find the same with Kingshighway and Forest Park Pkwy.

The S I 270 to W I 64 dedicated entry lane was excellent and I am dissatisfied that it is no longer used. It relieved a cumbersome bottleneck.

It seems that there is no sense of urgency in clearing accidents. Out east, they just push vehicles out of the way and out of the drivers view as quick as possible and then deal with the collision.

the traffic signs on 44 do not ever change - if there is an accident or slow down it rarely tells you about it

Remove or shorten (on the Forest Park Parkway) all of the stoplights on Forest Park Parkway from Euclid to Big Bend - these traffic lights are causing terrible delays on FPP.

I-70 and I-270 the extra lane helped, but on I-44 it made the road too narrow

The extra lanes on the highways probably help but are extremely dangerous!!!! They must be removed immediately upon completion!

The Temporary Lanes are very difficult to drive on. You basically drive on the rough pavement that used to be the shoulder.

During the second half of the project, the congestion on Forest Park Pkwy. has been awful. Much more traffic could be moved through quickly if the traffic lights were timed better. This could be the best alternate route in place of Hwy. 40/64 while it's closed, but instead it has been a parking lot.

Pavement on west bound FP Pkwy between Grand and Kingshighway is pretty rough along the right shoulder.

Why isn't there temporary lane addition in shoulder area on I-270 east of I-170? Illinois commuters have been completely ignored by MODOT - to suggest that I-70 is a viable alternative to I-64 as a means to get to Clayton is completely ridiculous.

Traffic light timing changes to support the western half of the construction, now need to be changed back!

From what i see on the morning news, 270 IS HORRIBLE!

I don't have an opinion on this, but I do for the commuting. You have to keep in mind working parents. Believe me, I would LOVE to leave for work earlier or carpool, however, I have two school age children. I have to have a car for emergencies. The kids schedule stayed the same, so does mine. However, now I have to work later to make up for my new start time. I am lucky because my husband picks them up. I can't imagine if I was a single parent trying to accomodate this. Plus, I checked out the bus routes. It takes way too long to get around.

variable speed signs were often not accurate. 511 didn't provide info on alternates to Clayton Road which was my main alternate while the west part was closed.

The addition of an extra exit lane on southbound 270 to 44east has made an extremely positive impact on the traffic flow at that internchange. I hope this will be considered a permanant change after 164 opens.

Trucks still speed on interstates but have narrower lanes. They can be pretty threatening.

metro link needs to handout free "try me"passes with a ridefinder link to single passenger cars lined up at lights at big bend, skinker and debalivere to induce using the metrolink next to them and reduce forest park traffic. I'm sure Wash U students would be ready activist volunteers. Be much more proactive to change st louis attitudes to use light rail and bus. Get more employers to incent the cost of commuting with green methods, carpools and light rail, especially those with parking problems.

The temporary lane additions in I44 and I70 should remain as permanent at the conclusion of the project. Marsha marshab80@gmail.com

Restriping was very dangerous - no shoulders!! Trucks and busses are not staying in their lanes, and wander into mine way too often. The Traffic Response guys seem to be doing a good job, but the incidents are reported on the radio/overhead signs too late to pick an alternate route. And - usually the info is wrong. Wrong lane reported closed, wrong direction on the highway, etc.

I-44 LINE PATCH PULLS MY CAR ALL OVER THE PLACE. IT'S HORRIBLE. NOW I STAY OFF 44 ALSO.

The temporary lanes on 270 and 44 shouls me made permanent after the I64 project is done. They ae more important to traffic flow rather than ahving the empty shoulders.

Since I didn't frequently travel my alternate route before construction, I don't know if impacts were better or worse.

i do not believe the statements that 6-8 years would have been required to accomplish the task if a different method of construction had been chosen. i think that extra time would have been measured in months.

The message boards are awesome through the metro :-) Keep those working...its awesome! The St Louis City Streets Director is completely ineffective...he is totally out of his league.

The signal timing on Forest Park Parkway is a joke. If you wanted people to stay off of it, you should have never timed the lights shorter to accomodate the idiots who continue to use it. This has caused severe backups on intersecting streets (aka Skinker). Common sense was definitely not utilized in this decision

the extra lane on 44 makes it bumpy and uneven, i think its dangerous

I don't reccomend travel on those hwys as the lanes are too narrow and dangerous. The improvements on the wester half do not justify the cost and problems caused. It won't handle more traffic if it narrows down to 2 lanes at any point. We should have left it alone or built a better and larger highway. Improvements that move traffic are minimal. Hay it looks great !

Westbound Dale Avenue at Hanley is a NIGHTMARE at rush hour.

I've not used or experienced the 3rd and 4th services. I have found your on-line service very useful. The signal timing efforts have helped with traffic involving the Parkway, but I'm VERY GLAD that I retired a couple years before this work took place (I worked at the Washington U. Medical School, and I'm pretty sure my commute time would have doubled or tripled. The city of St. Louis has planned especially badly for this trip, with the work on the Jefferson and Delmar Station bridges being done at the same time. It's especially interesting that the work on both of these bridges has taken them at least twice as long as it has taken the state to replace any bridge. I've felt that their notification about these projects to be pretty abject as well. The way I found out that the Jefferson bridge was down almost three years ago has when I started to turn off Chouteau coming west o use it; there wasn't even a warning sign on Chouteau as I recall, just a sudden absence of any street where Jefferson used to be. I assume no one landed in the void below, thought at night it would have been a real hazard.

How to Contact Comments

The following comments were left in response by those who wanted to leave additional input about how MoDOT could best provide them with information. The comments are presented as they were received.

The methods MODOT has used have been effective.

facebook

road signs work the best for me

I most prefer seeing the information on the display boards along the highways. It's convenient and effective.

Well publicized Town Hall meetings.

I think the workers should quit leaning on their shovels and the administrators should get out of the bars and go to rehab.

WHERE IS I-64 GOING IN MISSOURI'S FUTURE?

MODOT would do better by engineering things out first instead of reacting. Look at the 70 to 270 interchange. Why did they design in two lanes to go from east 70 to south 270 for morning traffic and only one lane to go north 270 to west 70 in the evening? Seems like MODOT does not understand everyone that goes to work in the morning returns home in the evening.

More road pics!

I'd rather them build another bridge over the Mississippi ASAP using the Gateway Construction group in again and get a new bridge up in 2 or less!!

Now that it is over how can we the people stuck with the "NEW 64" (here in St Louis it will always be Highway 40 so deal with it MODOT) No off ramp to Hanley? It was bottled up to volume so we will just eliminate it or Make everyone wait through the traffic of the shopping center? What was MODOT thinking? ? Someone was asleep at the wheel

Radio news is best since I spend most of my life in the car these days.

Not helpful, but "all of the above" should be used! And constantly direct people to the project website. Even so, you'll use the media as well as you have and then have clueless folks who are surprised by changes, closures, etc. You can't cure stupid -- but you can keep the rest of us informed, and so far you've gone a great job being visible and getting the word out.

TV program and commercials.

Strongly suggest AGAINST sending out things through the regular mail -- I believe most would view it as "junk" mail. The cost to produce and mail should be used for the IMPROVEMENTS!

I am concerned about the LAND APPLICATION UNIT being developed in front of my home. What was once a man made glade is now an eyesore of a dirt and debris. This debris could have been transported to the Weber location in Ladue by the many dump trucks and tractors that are now causing respiratory distress in the area 6 days a week (which is strange with 3 water trucks at the cement mixing site east of Brentwood Blvd). I have seen no aerial shots or topographical displays of the final construction, but was told that the land would be returned to its former natural habitat-a glade with blooming trees and flowering bushes. I have lived in the same location for over 50 years and remember the land during the original building of Highway 40. Time changes all things, but to create a dump in a Historic area is unbelievable.

I love the construction web cams. I look at them daily to see the progress. Good idea!

Any road signs beyond simply "INTERSTATE CLOSED - ALL TRAFFIC MUST EXIT" would have been nice.

I believe that the info has to come in a "hard" form so that it can be studied and evaluated rather than being a 30 second "sound bite."

The weekly chats on STLToday.com have been invaluable. If MoDOT continued to periodically have those chats (or perhaps just had an ongoing open Q&A section on their website) I would certainly continue to read it.

I never pay attention to the road signs providing information on construction, I am too busy driving trying to not get hit by those big trucks on 1-44. The signs don't give enough information to be effective anyway and if they did, I would have a wreck because I was trying to read all the info instead of driving. It has become so cumbersome to get to the zoo this year that my large family did not make the trek this year. If information is sent via USPS mail, it should be a postcard type mailing or I would probably throw it away as junk mail without reading it.

I thought that I signed up for email updates but I have never rec'd any about this project.

PLEASE don't put any more signs on the highway. It causes people to pay more attention to the signs than how they are driving. Rush-hour traffic is only made worse by these signs.

MORE SIGNAGE - guessing which lane to be in far enough in advance to avoid bottlenecks and dangerous maneuvers...still see lots of people cutting over and cutting it close at the 170SB > I64WB interchange. Little nervous about another winter and ice on those flyover lanes <grin> - first time around that curve on snowy day was...scary!

I have seen a few signs, but have noticed almost no attempt to get this info to the public, aside from a few newspaper articles. Oh yeah, and some pamphlets in a McDonalds! What about grocery stores, libraries, malls and many many more road signs.

I would much prefer to go to your web site to read the latest information but the news media seems to be doing a better job of getting the word out of upcoming changes. Today I read in the Post Dispatch about the closing of the Brentwood bridge overlapping with the closing of Hanley. I'm sure glad I read the paper today!!

I like the MoDot Emails sent out on a weekly basis

I like receiving email updates on the I-64 project.

Local television news and morning radio has helped us the most.

I tried to map my ride and it isn't working for me. I need to find sites that truly are working with the closings.

The regular emails from MoDOT have been by far the most helpful for me and my family.

our office on Big Bend had a representative on MoDot come to our office with information, hand outs, answered all our questions!

email, email, email road closures BEFORE they are closed.

it doesn't really matter how you notify the public about changes they don't notice them or read them.

It's a shame the countdown signs aren't always "on" and functioning.

I like the flyers that I have seen at my gas station at dale and hanley that have been published and distributed by MoDOT

More display boards on alternate routes

I don't have a TV, get a newspaper and rarely listen to the radio. So I would go look for info online as I heard about it. But it would have been wonderful if perhaps you all would have partnered up with the various business/companies/organizations around the metroplex to equip them with info and alt route suggestions to communicate to their employees (or to at least give them the info/option to sign up for any newsletters/emails that you all might have provided). With the west closure, I did move from the city to west county since 64/40 was what I took every day to work. The people running my company didn't know any more about the project than I did.

I get frequent update information from the Richmond Heights e-mail alerts

See previous comment about calling I-64 only I-64 rather than mentioning Highway 40

The message boards are awesome...they're great :-)

Placed on the road to receive the work one week prior to construction.

I no longer take the daily paper, so that is less useful to me. TV news and on-line notices are most effective for me, though I think that radio is probably useful for many people, who listen while they drive, and the signage about closure on the feeder routes are also very good, because they allow drivers to plan alternate routes on the go, and avoid the centers of real congestion. I'd still like to see more information about north-south routes about the closure, and I think that on future projects the highway department would do well to remember that the St. Louis region goes a very long way north and south, and many people commute or have necessary contacts which require them to use mid-area east west roads on a regular, frequently daily, basis. They could also try to see that St. Louis and other towns near such projects work harder at having their road projects near such construction in better order, that is, finished, before a major route is taken down. The Delmar Project is a prime example of such a misjudgment, even at the times of day I travel, I've seen two block long lines of traffic creeping across the bridge in the single lane traffic. I can only shudder to think what it must be like at rush hour.

Alternative Website Comments

The following comments were left in response by those who responded to *If you heard about the closure through one or more sites not listed above, please tell us which site(s)*. The comments are presented as they were received.

stlbeacon.org

What closure? Just kidding! The information at the TV channels is only as good as the writer who prepares the report, and sometimes it's not very good--see, for example, the item at ksdk.com for the Hanley-Eager "jug handle" opening. It's too sketchy to do much good.

I rarely visit any of those sites

My work helps keep people informed as well.

twitter would be nice. we could get a text about work going on even if we are out and not near tv or computer

KEZK does a really good job with updates from KMOV

There are no minority communications listed and you are working in a diverse area of the city and county. Try a little harder to get the message to ALL.

<<http://www.urbanstl.com/>>

I get the best information from signs in the businesses that are impacted by the highway closures -- especially Dierberg's.

My favorite source was TheNewI64.org. You guys did a great job keeping communications updated, easy to access, specific to areas of interest, printable to keep in the car for reference or for out-of-town visitors. Nice job!

KWMU

KWMU - 90.7 FM

TheNewI64.org

I will add these sites to my favorites and check them out.

KWMU

stltoday.com

i watch info on thenewi64 and am active follower of the changes, i'm not at all standard commuter.

msn.com

Fox News FNN.com, Google.com, Googlemaps.com

mapquest.com and maps.google.com

tv 11

Richmond Heights citizen e-mails

I-64 Project Website Comments

The following comments were left in response by those who responded to *What additional information would you like to see on the I-64 Project website?*. The comments are presented as they were received.

Well, shoot! I thought I'd get to check several boxes above. Closure information is most important. But it's interesting to see the progress via the webcams.

The construction zone map does not tell the exact date bridges will reopen. Map my trip is not functioning.

a pictorial update on what has been completed and what is going on now

Dates stretches will open.

Better maps - some of those aerial views didn't make it really clear what it was going to look like. Is Eager Rd getting an extra lane, for example? THAT street has been a mess ever since Target went in. I avoid it from T'giving until New Years. The holiday shopping traffic is worse than around the Galleria...awful on Saturdays, too...

Keep us informed on what "leftover" work you are doing on the western half of the closure (I noticed today that soundwalls are not done yet)

When closed areas (eg crossroads, bridges) will reopen.

I love the maps. Very interesting.

Clear maps showing alternative routes across the closure.